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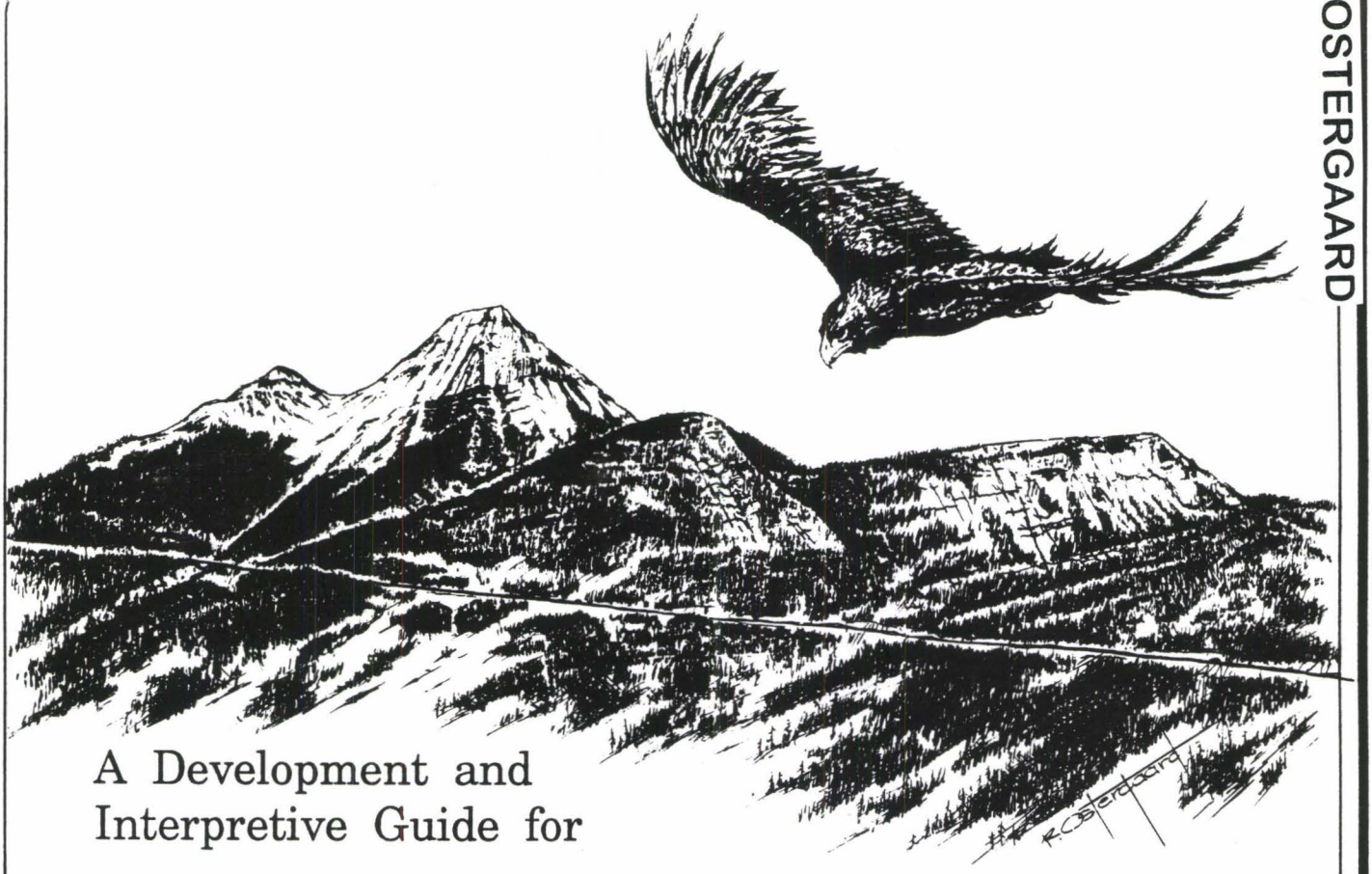

A Development and
Interpretive Guide for

THE SAN JUAN SKYWAY

A National Forest Scenic Byway

Prepared for:

San Juan and Grand Mesa, Uncompahgre, and Gunnison National Forests, in cooperation with Clemson University

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A DEVELOPMENT AND INTERPRETIVE GUIDE FOR THE SAN JUAN SKYWAY A NATIONAL FOREST SCENIC BYWAY

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ABSTRACT

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A DEVELOPMENT AND INTERPRETIVE GUIDE FOR THE SAN JUAN SKYWAY A NATIONAL FOREST SCENIC BYWAY

The 232 mile route through the **San Juan Mountains** of southwestern Colorado, including the historical section of the "Million Dollar Highway", was **designated** by Forest Service Chief Dale Robertson as a **National Forest Scenic Byway** on November 11, 1988. It was also designated by the State of Colorado Scenic Byway Commission on October 3, 1989, as a **State Scenic and Historic Byway**. Both were the first such designations in the state. The **nationally popular** drive connects the historic towns of Durango, Silverton, Ouray, Telluride, and Cortez. The Byway traverses some of the most **spectacular**, rugged, and primitive **landscapes** in America. The area is rich in cultural resources ranging from the Archaic and Anasazi habitations, to the colorful mining era of the San Juan Mountains in the 1800's, including the development of the narrow gauge railways through the area. In keeping with the primary goals of the national scenic byway program, the physical development of highway **scenic overlooks** for natural or historical **interpretation**, will be vital.

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EXECUTIVE SUMMARY

Designation of The **SAN JUAN SKYWAY**, as a National Forest "Scenic Byway" has an identity as one of the "Crown Jewels" of the National Forest System. The nationally popular 232 mile loop connects the historic mountain towns of Durango, Silverton, Ouray, Telluride, and Cortez in southwestern Colorado. The drive traverses some of **the most spectacular**, rugged, and primitive country in all of America. It has been referred to as "The Most Scenic Drive In America," and rivals any alpine landscape in the European Alps.

It was **designated by Forest Service Chief** Dale Robertson as a National Forest Scenic Byway on November 11, 1988. It was also designated by the State of Colorado Scenic Byway Commission on October 3, 1989, as a State Scenic and Historic Byway. These were the first such designations in the state. It has received strong support both locally and nationally. The **goals and objectives** of the Forest Service national program are to provide opportunities **to showcase and interpret the outstanding resources** of the routes, as well as increase the public's understanding, appreciation, and enjoyment of them.

The major **topic of the paper** is how the Skyway can be planned, designed, and **developed** to meet its potential as a key attraction of southwestern Colorado, while gaining national and international attention. **The project's intent** is to provide a **framework and focus for that development** and to be responsive to defined goals. This is done by identification of logical and feasible sites that have significance for interpretation. At this time, little or no effort has been taken to improve any sites along the route for this purpose.

The **enclosed listing of sites** is a result of many hours of inventory work. There were numerous field trips, and also coordination with Forest Service staff, other agencies, and private groups. Briefly, **the criteria used** in this process employed for site selections are: 1. **interpretive relevance** or importance, and 2. analysis based on **physical feasibility**. (i.e., terrain, highway grade and width, access and egress, etc.)

This **study is directed toward** forest level staffs, rangers and supervisors of the San Juan, Grand Mesa, Uncompahgre, and Gunnison National Forests. It **will benefit** the Forest Service as well as other agencies, and private interest groups, in the development and interpretation of the resources along the San Juan Skyway. It also will aid these groups in marketing this outstanding attraction for tourism. It will benefit the American and international public as a result of its future development which will add in their enjoyment of the Skyway. And finally it will serve as an example for an approach to planning, designing and developing other scenic byways.

Results of this study and its recommendations have been adopted and submitted to the Rocky Mountain Region for Fiscal Year 90 **Capital Investment Project** submittal for the San Juan and Grand Mesa, Uncompahgre, and Gunnison National Forests. It was the number one recreation development priority for both management units. It has also been the basis for **major partnerships** to develop sites; the most significant is the $300,000 Durango Entry/ Skyway Introduction Site located on the busiest intersection in the southwestern part Colorado.

Also as a result of this effort, an **inter-agency Visitor Center** proposal is being considered by a number of agencies as well as Congressman Ben Nighthorse Campbell. The Forest Service Washington Office has designated the Forest as a center for "Design Excellence" for scenic byway development. This will demonstrate to other Scenic Byway planning programs, throughout the country, techniques of how to plan, design, and develop facilities along other routes, including interpretive approaches.

Recommendations as a result of this paper are:

1. **Target the project as a "DEVELOPMENT IN EXCELLENCE"** in all facets of planning, design, and construction. Assure that in the detailed design of the sites, signing, exhibits, and promotional/informational material, **quality is the best that is professionally possible.** Budget, manpower, and future maintenance concerns, should not be a constraint nor limiting criteria. Develop the Skyway to an optimum quality level and at a scale and detail that would allow it to evolve as one of the best examples of a scenic byway in America.

2. **Classify the Skyway as a "Special Area"**, somewhat like a Forest Service NRA (National Recreation Area). Its management, including promotion, operation, future planning, and maintenance, would be assigned to a Skyway Manager who would have appropriate permanent staffing level with sole responsibilities for the Skyway. The Skyway Manager would report to one of the Forest Supervisors.

3. **Organize a citizen interest or action group,** such as **"The Friends of the Skyway"** that would aid in the byway's development, promotion, and future management. This could be easily made up of volunteers from the towns along the Skyway as well as various service groups that have interest in its promotion.

4. It is recommended for **garbage management,** the Skyway be operated as **a "pack it in-pack it out"** system. This program is working well on a few test Forests at this time. The program will obviously need strong initial promotion, managerial commitment, and ongoing emphasis to make it work.

From the Project Development Discriptions it is obvious that natural and cultural resources are present in abundance to achieve the stated vision and goals. The scenery is world renowned; the history is unique and captivating, and national recognition is building.

Two quotes might be used to illustrate and summarize the task ahead: Duane Smith, a well known historian of southwestern Colorado stated, "The San Juan Skyway is **a historic treasure box**.....it can tell as much history of Colorado as any other drive in Colorado". Bob Ross, Forest Service National Scenic Byway Coordinator has stated; "You need to realize what you have here, what you are doing, and the resource you have to work with. The Skyway is a **premier National Forest Service Scenic Byway** and has all the potential to be recognized as **world class**."

----- ACKNOWLEDGEMENTS -----

I would like to thank Dr. Duane Smith, Joanne Westphal, Ken Charles, Karen Johnson and Gina McLellan for their reviews and helpful suggestions in the content and format of this paper.

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I thank my design team Rick Dustin, Tom McMurray, and Jodi Sorensen for their effort in the development of the Exhibits, and also Dave Coleman for the use of the Macintosh in the graph production.

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DEFINITION

A scenic byway is a travel route which traverses a corridor of outstanding aesthetic, cultural, historic, or interpretive forest values. A designated route will provide the traveler with spectacular scenery in harmony with forest management activities.

I. INTRODUCTION

Designation of the SAN JUAN SKYWAY, as a National Forest "Scenic Byway" has been recognized as one of the "Crown Jewels" in the National Forest System. The nationally popular 232 mile loop connects the historic mountain towns of Durango, Silverton, Ouray, Telluride, and Cortez in southwestern Colorado. The route features the San Juan, and Grand Mesa, Uncompahgre, and Gunnison National Forests. The drive traverses some of the most spectacular, rugged, and primitive country in all of America. Often referred to as "The Most Scenic Drive In America," for some the drive rivals the alpine landscapes of the European Alps.

The development of the San Juan Skyway is not a simple project. It represents one of the largest and most complex cooperational recreation development undertakings in the history of either Forest as well as the Rocky Mountain Region. It is the longest and perhaps one of the most recognized Forest Service scenic byways covering 232 miles. Historical, cultural, and natural resources exist in both the quality and the quantity necessary to achieve the intent of this proposal and with time it will become an outstanding example of a National Forest scenic byway. It is nationally renowned, receiving increased use each season, and it has the potential at this point of becoming one of the major tourism landmarks and use attractions in the West. It must be recognized that in planning and development of the Skyway, traditional thinking and existing management approaches could drastically impede and stagnate the project. Therefore, it is crucial that the best in creative planning, design, and management available, be applied to the project.

The Skyway was designated by the Chief of the Forest Service on November 11, 1988, as a National Forest Scenic Byway, and by the Colorado Scenic Byway Commission as a State Scenic and Historic Byway on October 3, 1989. Both were the first such designations in the state of Colorado. It is essentially the first step in the Chief's new approach of the Recreation Strategy. The designation was a result of agreements and commitments of the Colorado Division of Highways, the Bureau of Land Management, and the two National Forests involved. The development, maintenance, and promotion of the scenic byway will be a cooperative partnership between these agencies as well as public partnership groups.

The Skyway has received strong support from associated communities and interest groups since its inception, and it is rapidly receiving an identity as a **key attraction** for tourism in southwestern Colorado. The role of local communities, government, and state level entities in development, marketing, and promotion of the Skyway will be very important. Vital to the success of this cooperative effort is its emphasis as a "**National Attraction and Destination**"

and a compliment to the existing local attractions of Mesa Verde National Park and the Durango-Silverton Narrow Gauge Railroad.

The Skyway development program focuses on sites designed and planned to enhance the visitors' experience. These will include **overlook sites** provided for the interpretation of the surrounding scenery, history, and forest management activities. For example, the traveler may see cattle grazing, wildlife habitat projects, ski areas, firewood gathering, and other forest activities that blend with the scenic beauty and/or history of the area. Other facilities, some of which are existing, will include **visitor centers, trailheads, associated campgrounds and picnic areas**, or other improvements that will enhance the recreation experience of the visitor.

It should be noted that as we become more familiar with visitor needs and desires, some of these sites may be modified or excluded and others may be added to ensure customer satisfaction. If we are to provide a quality experience and strong customer satisfaction, the process of planning and development of the Skyway must be dynamic and flexible so new information and research along with development opportunities, including funding and partnerships, can be employed.

A. *STATEMENT OF PURPOSE*

The National Forest Scenic Byways program carries the creative spirit of the National Forest Recreation Strategy in linking the public to National Forest outdoor recreation opportunities. The Recreation Strategy is a conceptual framework aimed at finding creative and imaginative ways to take advantage of outdoor recreation opportunities on the National Forests by working with people. The purpose and **overall goal of this paper** is to outline steps that may be used for the development of the Skyway. Hopefully, by outlining the process one can determine if the creative spirit and intended results (increased recreational benefits and customer satisfaction) may be realized through this effort.

As stated in the project prospectus, (note Appendix) **the major objectives of the paper** are: **1).** *identify all existing and potential sites suitable for development* along the byway, and **2).** *provide interpretive research* for each of the above sites that will aid in the ultimate development of interpretive stories for the different sites. In addition, two other objectives have evolved: **3).** *to outline appropriate facility designs and their associated costs* and, **4).** *to develop a case study document that can be used by others contemplating a similar undertaking.*

This paper identifies interpretive opportunities along this scenic byway, gives research on each opportunity that may be used as a foundation for interpretive story development, and makes a site selection based on physical construction feasibility. As is sometimes the case with a project of this magnitude, the initial objectives are modified and refined somewhat as research and development progresses. In the case of this paper, the above objectives are treated in the following manner.

The paper addresses the **design of the sites in some detail**. It identifies access requirements, types of facilities, program components, and goes into detail regarding the design of the facilities, siting, and cost estimation. It specifies what would be included in each of the interpretive overlooks. The cost estimates shown are intended to establish an overall initial cost estimation based on the preliminary plans, (examples of which are enclosed herein) and be suitable for funding requests needed to implement the proposed development. The estimates are based on materials, labor, hauling costs, mobilization, and contract contingencies. The estimates are reflective of preliminary architectural and engineering designs. They may be considered as a basis for establishing a budget for program funding. A final detailed cost estimate, using the enclosed costs as a basis, will be developed for the final construction contract packages.

This report is not a comprehensive interpretive plan, but may **be considered as an interpretive guide for use in detailed planning and design of each facility**. The suggested interpretive subjects are a result of research as well as information discovered during the site inventory process. It examines the interpretive resources and opportunities of the listed 48 sites. Based on the analysis of these opportunities and factors, the report establishes concepts for interpretive development. The story narratives noted on each of the sites are a result of research conducted on each site and are intended to aid in the final interpretive story outline for each site. These recommended concepts and messages will form a framework and foundation for detailed interpretive planning and design efforts to follow. The interpretive recommendations emerging from this initial planning effort may change in the future as a result of further study, changes in management policy, and visitor trends. A responsible interpretive program should respond to meet them.

This **study is directed toward** Forest level staffs, Rangers and Supervisors of the two management units of the San Juan, and the Grand Mesa, Uncompahgre, and Gunnison National Forests. It will benefit the two Forests, as well as other agencies, and private interest groups in the development and interpretation of the resources along the San Juan Skyway. It will also aid these groups in the marketing of this outstanding attraction for tourism. Finally, it may benefit the American and international public in their enjoyment of the Skyway and may serve as an example of planning, designing and development, for other scenic byways in America.

The projects described in this paper are a product of the following goals and objectives. These goals and objectives are reflective of the San Juan Skyway and also the national scenic byways program.

GOALS:

- Showcase outstanding scenery.
- Provide travelers with a scenic, provocative and educational experience, they will enjoy and remember.

- Feature the significant historic, cultural and physical resources of the area.

- Stimulate local economies of the towns along the way by increasing the public's enjoyment of the driving experience as well as its visibility. This in turn will enhance tourism in southwestern Colorado.

- Increase the public's awareness and understanding of the National Forest as the major provider of outdoor recreation and of National Forest management activities.

- Meet the growing demand of "driving for pleasure" as the most significant recreation use in the United States.

- Increase the use of the National Forests by non-traditional users including urban minorities, the disadvantaged, and the elderly.

- Contribute to the nation's overall scenic byways effort.

OBJECTIVES:

- Develop scenic overlooks, points-of-interest and other facilities for enjoyment of interpretive attractions along the Skyway.

- Manage and maintain scenic viewing opportunities through various vegetative management techniques.

- Develop a strong signing program that will strengthen the U.S. Forest Service identity, image, and visibility, and interpret land and resource management activities where appropriate.

- Utilize partnership opportunities for all projects to insure a broad base of local support and interest in the Skyway and its specific projects.

- Stress "Quality" in all facets of planning, design, construction, operation and maintenance and other phases of the San Juan Skyway development.

- The viewshed corridor along the Skyway will be managed primarily for maintenance and enhancement of scenic beauty. Other management activities may include management projects for vegetation, wildlife habitat, cultural/historic stabilization, watershed enhancement, forest disease and insect control, and development of recreation facilities.

- Develop sites that insure access to all user groups by incorporating considerations of physical and social needs of the public in the design, layout, and location of the sites.

- Provide wayside areas that allow the travelers an opportunity to rest and experience one or more unique attributes of the Skyway.

B. *PHYSICAL DESCRIPTION OF THE ROUTE*

The SAN JUAN SKYWAY is located in southwestern Colorado between Durango and Montrose. It is a 232 mile loop that runs from Durango on Highway 550 north over the "Million Dollar Highway" to Ridgway, then west to Highway 62, south past Telluride on Highway 145 to Cortez, then east on Highway 160 to Durango. The designated scenic byway is a cooperative effort between the Grand Mesa, Uncompahgre, and Gunnison National Forests and the San Juan National Forest (See the attached Map, *Exhibit "I"*).

The route passes though six Colorado counties: La Plata, San Juan, Ouray, San Miguel, Dolores, and Montezuma. The entire road route on the above-mentioned highways is under the jurisdiction of the Colorado Division of Highways with the District Engineer's office located in Durango.

Mileage of Forest Service, other Federal, State, and Local Roads:

U.S.D.A. Forest Service	91 miles *
U.S.D.I. Bureau of Land Management	17 miles
State of Colorado	3 miles
Private	121 miles *

*NOTE. Approximately 212 miles of the Scenic Drive will be in the National Forest Influence Zone. This zone will encompass an area within the Forest boundary with the exception of narrow land ownership patterns on either side of the highway. National Forest land will be a component of the foreground view with only 39 miles of the entire drive isolated from National Forest system land. Even in those instances, some parts of the National Forest always will be in view along the entire route.

The San Juan Mountain Range covers 12,000 square miles of high country which has been referred to as "The Land of Endless Mountains". Originally called the Sierra Madres or "mother mountains" by the Spanish; the name refers to the elevation of this range and the comparison to other ranges that were not yet fully grown. The mean elevation of the range is 10,000 feet making it one of the four highest in the United States, with more than 100 peaks over 13,000 feet and 14 in excess of 14,000 feet. Over two million years of strata may be recognized in the folding and faulting of the range in the rock formations.

From a historical standpoint, the loop is a drive through time. Remnants of an earlier era remain in the form of abandoned mines and cabins in the many historic mining districts along the route. The ruins may be easily and safely viewed from the roadside. These antiquities of Colorado's mining past stand in time attesting to the extremities of the high altitude

PROJECT VICINITY MAP

SAN JUAN SKYWAY

conditions. About one half of the total area was historically incorporated into mining districts in the late 1800's and early 1900's. Historically, these mines have yielded over one billion dollars worth of gold, silver, zinc, lead, and copper. The majority of the region still retains most of the rich ore, but because of the rugged terrain, remoteness, and unpredictable weather, the minerals will likely remain as a perpetual asset of these mountains. The drive also takes visitors through a land rich in historical and cultural resources. Adjacent national attractions include Mesa Verde National Park and the Durango - Silverton Narrow Gauge Train.

The most popular single recreation use of the scenic loop drive is driving for pleasure. The travelers make frequent stops to photograph and view the scenery and interest points along the route. However, viewing the roadside attractions is just part of what the visitor may experience along the route. The public may enjoy the traditional activities of camping, fishing, hiking, picnicking, 4x4 driving, and skiing. More specialized adventurers may test their skills in a myriad of backcountry arenas. Newer sports; such as mountain biking, hang gliding, mountaineering, and wind surfing are flourishing here.

Four classified wilderness areas are accessible along the route; Weminuche, Big Blue, Mt. Sneffels, and Lizard Head. Viewing opportunities for such wildlife species as elk, mule deer, bighorn sheep, coyotes, eagles and marmots abound along the route.

Currently, the peak season for use of the loop occurs during the summer months; but winter also attracts drivers in pursuit of winter recreation activities. The ski areas of Purgatory and Telluride are accessible along the Skyway.

II. ASSUMPTIONS AND ISSUES

A number of assumptions and issues were identified in the initial site inventory, and literature research. These are as follows:

A. *ASSUMPTIONS:*

1) Scenic byway designation and local and national visibility of the route will result in **high public expectations** of high quality facilities and route development along the Skyway.

2) The **tourism industry will continue to grow** on local, regional, and national levels and will become the nation's number one industry.

3) Future **visitors** to the Skyway **will be increasingly urban**, better educated, and will be proportionally older than today's visitors.

4) **Visitors** to the area **have a set of expectations** when they arrive in southwestern Colorado relating to an image of the Rocky Mountains, which is in part, rugged mountainous ranges of spectacular peaks, majestic views, historic mining areas, and cultural diversity.

5) Landscapes that feature the most **variety and diversity** are the most favored with those visitors using the route for sightseeing and driving for pleasure.

6) **Visual preferences** of these visitors are tied directly to **natural occurrences** rather than manmade changes of the landscape. They expect to see natural or natural appearing landscapes.

7) The Skyway, when developed, will **aid tourism marketing** efforts in southwestern Colorado.

8) The traditional mission, organization, and budget of the Forest Service has not lent itself to personal contact interpretive programs, such as those of the National Park Service. This approach will not likely change significantly in the future. Interpretive programs such as oral presentations, walks, or Ranger evening programs, will be the exception and not the rule. **Interpretation by the Forest Service will mainly be through signing, visitor center displays and hand out brochures**, guides, and maps. There will be limited presence of Forest Service personnel on any Skyway facility. However, there may be some interpretation of the Skyway by volunteers or Forest Interpretive Association members.

9) The use of **interpretation as a device for altering behavior and attitudes** may meet with **adverse public reaction**.

10) Development of **interpretive opportunities** of selected sites on the Skyway will **enhance the enjoyment and experience** of the visitor.

11) The prospect of receiving Forest Service **line item funding** in the future for operation and maintenance of the Skyway **is doubtful**. Therefore, the facilities must be designed and constructed in such a way and with materials that would maximize the use of low maintenance programs such as no trash pick up (pack it in-pack it out), and partnership maintenance agreements.

12) Development and marketing of the Skyway as a major attraction will **bring more tourism to the associated towns** along the route, but it will also **increase the amount of traffic** on the route.

B. *ISSUES:*

1) With the influx of visitation projected as a result of the Skyway, what **adjustments will have to be made** for traffic management and highway improvements?

2) **Operation and maintenance budget needs** of the Skyway will need to be established and a means for securing continuous funding for those needs will have to be identified. What potential sources or options are available?

3) Is the Forest Service ready for this? What is management's future vision for the Skyway? **What is the level of commitment of Forest Service** management and other agencies to support this aggressive program? How can the management of the Skyway be integrated into the traditional funding and operational programs of the Forest Service?

4) How can we blend the **mission statement of the Forest Service** (i.e., multiple use) **into the interpretive messages** in a way so it will not be received as agency propaganda?

5) How can interpretation be packaged and presented in a meaningful and cost effective way?

6) How can the Forest Service **best support the private sector** in the development of identified sites off-Forest? Can cooperative agreements be established with the private sector that facilitates complementary site development and prevents competitive/redundant development efforts? What approach or process would facilitate this type of cooperative agreement?

The above assumptions and issues will have implications on the development and operation of the San Juan Skyway. As a result, they bring out the need to clearly apply the stated objectives and goals to the development of the Skyway. However, this paper is not intended, nor should be accepted as resolving all of the above questions or evolving future problems.

III. METHODOLOGY:

The following method was used to guide the development of the conceptual site designs and interpretive recommendations.

1) A **literature search** was conducted that documented the subject of "Driving for Pleasure", scenic highway/byway development, and interpretive planning. This information was used in the study to develop specific design concepts and solutions.

2) A review of existing Forest Service **policies and direction**, and recent Washington Office developments that focused on the rapidly moving scenic byway movement.

3) Field work involving an **inventory of the entire 232 miles** of the Skyway for interpretive site or other facility potential was conducted. Input and recommendations from the Forest Service staff including seven districts, other agencies, as well as private sector comments, were solicited. The two basic criteria initially used to identify potential site and opportunity was: a) interpretive relevance and importance and, b) physical construction feasibility. Physical attraction was also considered. A more detailed overview is given in the SITE EVALUATION PROCESS section under **DISCUSSION**.

4) **Interpretive concepts** were identified and incorporated into the suggested "INTERPRETIVE SUBJECT(S) section of the guide. The basic concepts are:

   - Introduction and Orientation
   - Cultural History of the Skyway Region
   - Natural History of the Skyway Region

   A more detailed overview is given in the following INTERPRETIVE DEVELOPMENT section under **DISCUSSION**.

5) Based on research and professional experience, a **design philosophy was developed** for application of three basic modules into the overlook interpretive sites and other facilities for the route. These modules or plans were designed to enable repetition from site to site, fit aesthetically on the landscape, and also be functional for the intended use. A detailed description of these plans is in the SITE DESIGN PHILOSOPHY AND APPROACH under DISCUSSION.

6) A list of design criteria was adopted and modified from the the Forest Service national guidelines for scenic byway development (USFS 1988). These were used as the baseline criteria to design the preliminary facilities and also define the interpretive approach for the San Juan Skyway. The design criteria included:

   a. *User Safety*

   User safety is to be a primary concern. Separation of pedestrians from traffic and separation of parking/entrance roads from highway traffic are important design features. Barriers along edges of hazardous areas are also important. Right and left acceleration/deceleration highway lanes will be installed where necessary. Others might include hazard tree removal, location of sites in relation to known avalanche paths, etc.

b. *User Convenience*

Easy access off and on highway, minimal traffic congestion, adequate toilet, picnic, and resting facilities, are all examples of design to ensure user convenience.

c. *Quality of Facilities*

Signs, facilities, parking, and roads should all reflect a high professional design standard as well as incorporate low operation and maintenance features. Parking should all be paved and curbed, walkways should be concrete adjacent to the parking. Trails will be asphalt or stabilized with soil cement. All facilities should be designed to be vandal resistant, withstand extreme weather conditions, and require minimal maintenance.

d. *Variety of Stops*

A variety of interpretive subjects should be provided in wayside pull outs along the route. The size and function of the sites will be designed to complement obvious scenic, interpretive, and/or recreational attractions as well as consideration of site limitations.

f. *Development of Interpretive Theme(s)*

Interpretive theme(s) will be developed in the planning process that will reflect the resource significance of history, forest resource management, cultural, geology, and scenery.

g. *All Facilities Designed for the Physically Challenged Where Possible.*

This includes openings in curbing, toilets, picnic areas, and trails. Where trails have slopes that would make it impractical to construct a grade for wheel chairs, alternative locations will be developed.

IV. LITERATURE REVIEW

The following are the major sources used as a basis for the organization and development of this paper. Each reference is presented with a short statement of how the literature was used in this report. The total list can be found in the Appendix Bibliography.

The literature search revealed numerous references on tourism. However, the major recreation activity along scenic highways, "driving for pleasure", and its market assessment on a national, regional and local scale was somewhat limited, but increasing as a result of the national scenic byway movement. The following are the major sources used on this topic:

McLellan, Gina; *THE FUTURE OF OUTDOOR RECREATION - WHAT THE TRENDS TELL US*, 1986, Parks and Recreation Magazine, May/86
-Social, activity, tourism, policy, and economic trends of the future.

Presidents Commission on American Outdoors; *TRENDS IN OUTDOOR RECREATION AND RELATED FACTORS* 1986, Alexander, Lamar - Chair GPO 86-63-802
-Analysis of opportunities, needs, future needs, of outdoor recreation.

U.S. Department of Transportation/Federal Highway Administration; Proceedings of *SCENIC BYWAYS 88' CONFERENCE*, 1988, Pub. FHWA-DF-88-004
-Identification and trends of the national scenic byway movement.

A number of related studies and demographics of southern Colorado were used to describe visitor characteristics and use levels. The author did not actually perform, nor was he present during the collection or synthesis of the data, so there are certain limitations of determining sample accuracy and randomness, but for the stated intent of this paper it is believed the the data is sufficient and reasonably accurate.

Charles, Kenneth J.; *THE DEVELOPMENT OF A MARKETING PLAN FOR LAKE CITY / HINSDALE COUNTY COLORADO*, 1989, Office of Economic Development, Fort Lewis College, Durango, CO
-Description and demographics of visitors of the area.

City of Cortez Colorado; *CORTEZ INDIAN FOLK VILLAGE MARKET ASSESSMENT* 1988, Wood Bay Consulting Group LTD., Boulder, CO
-Determining the characteristics and preferences of visitors.

Colorado Tourism Board; *COLORADO'S OPPORTUNITIES IN THE U.S. PLEASURE TRAVEL MARKET* 1988, Longwoods Research Group LTD., Toronto Canada
-Determining the characteristics and preferences of visitors.

Romero-Leone, Karen; *DURANGO VISITOR RESEARCH, 1986-1989*, Office of Economic Development, Fort Lewis College, Durango, CO
-Market research and demographics of the Durango tourism market.

U.S. Bureau of Reclamation; *AN INTERPRETIVE STUDY OF SOUTHWEST ARCHEOLOGICAL SITES*, 1977, Consortium West/Concept Design SLC, UT
-Tourism research and demograhics of the Four Corners area.

There was minimal documentation on research done for interpretive signing and facility designing along a scenic highway. Much of interpretive research is a result of the National Park Service personal contact interpretation programs such as Ranger talks and walks. Fortunately, there was an abundance of historical documentation, resulting from the colorful past of southwestern Colorado. The following sources aided in the interpretive story development and also physical site design philosophy.

Crofutt, George W.; *CROFUTT'S GRIP-SACK GUIDE OF COLORADO*, 1885, Pruitt Publishing Co., Boulder, CO
-Research of early history of tourism in southwestern Colorado, also established historical review of the Skyway region.

Ferrel, Mallory Hope; *SILVER SAN JUAN - THE RIO GRANDE SOUTHERN*, 1973, Pruitt Publishing Co., Boulder, CO
-Historical research for interpretive stories.

Gregory, Marvin, Smith, P. David; *THE MILLION DOLLAR HIGHWAY - COLORADO'S MOST SPECTACULAR SEVENTY MILES*, 1986, Wayfinder Press, Ouray, CO
-Historical research for interpretive stories.

MacIntosh,Barry; *INTERPRETING IN THE NATIONAL PARK SERVICE - A HISTORICAL PERSPECTIVE,* 1988, U.S.D.I. Park Service
-Interpretive theme development.

Sontag, William; *SYSTEMATIC PREPARATION OF THEMES, GOALS, AND OBJECTIVES*, 1985, U.S.D.I. National Park Service, Rocky Mountain Regional Office
-Development of interpretive themes.

Smith, Duane A.; *ROCKY MOUNTAIN BOOM TOWN - A HISTORY OF DURANGO COLORADO, 1986*, *SONG OF THE HAMMER AND DRILL - THE COLORADO SAN JUANS, 1982*
A LAND ALONE: COLORADO'S WESTERN SLOPE, 1981, Pruitt Pub. Co., Boulder,CO
-Historical research for interpretive stories.

Tilden, F.; *INTERPRETING OUR HERITAGE*, 1967, Univ. of No. Carolina Press
-Applications of established interpretive principles and application to the story narratives for the Skyway.

U.S.D.A. Forest Service; *OUR NATIONAL LANDSCAPE* - **PROCEEDINGS** 1979, General Technical Report PSW-35, Berkely, CA
-Harvard, Peter M., Chaplin, Bernard L.; *HIGHWAY DEVELOPMENT*
-Mcguire, John R.; *MANAGING THE FOREST LANDSCAPE FOR PUBLIC EXPECTATIONS*
-Patey, Roberta C., Evans, Richard M.; *IDENTIFICATION OF SCENICALLY PREFERRED FOREST LANDSCAPES*
-Research in landscape analysis, public expectations, and highway corridor cumu- lative impacts.

U.S.D.I. Park Service; *VISUAL PREFERENCES OF TRAVELERS ALONG THE BLUE RIDGE PARKWAY*, 1988, Noe, Francis P., Hammitt, William E. Editors, 0-943475-00-71.
-Identifcation of important landscape features as a criteria for site selection.

V. DISCUSSION

A. *RECREATION STRATEGIES*

The Skyway is an integral part of the National Forest Recreation Strategy. It provides interpretation, education, marketing, and partnership opportunities. It also meets the desires of the traveler and enhances a recreation experience of "driving for pleasure", which is the single most popular form of outdoor recreation in America (Federal Highway Administration 1988).

Partnership opportunities are growing. Colorado-Ute Electric Association has already constructed a picnic area at Lizard Head Pass; La Plata Electric has committed money to help fund a booklet for the Byway; other electric cooperatives have expressed an interest in funding projects; Chrysler Motors is a national sponsor. There are two Forest Interpretive Associations as well as The Colorado Southwest Tourism Region active in the Skyway promotion. There are also partnerships with other agencies such as BLM, Division of Wildlife, cities of Durango, Cortez, Ridgway, Silverton and Mancos, other local communities, the local Counties, the Colorado State Division of Highways, and other groups.

The entire route on federal lands has been inventoried and classified using the Forest Service *Visual Management System* (USDA Forest Service 1974). The Visual Quality Objective of **"Retention"** is assigned from the foreground to the background distance viewing zones. This implies that management activities or additions to the landscape should *not* be visually evident.

The Forest Service Recreation Opportunity Spectrum (ROS) levels were assigned to different sections of the Skyway as a result of the Forest Plans on both management units. The highway corridors of the entire route on Forest Service administered land are predominantly **Roaded Natural and Rural** at this time. The ROS Setting may change one level as a result of the Skyway project. Lands in private ownership would be Rural and Urban. The facilities for the Skyway will be designed to facilitate the activity of "driving for pleasure" and would be Recreation Experience Level Four (4).

B. *VISITOR CHARACTERISTICS - USE LEVELS*

The summer Skyway user is mainly a vacationer/sightseer (tourist) driving the route for pleasure, during a vacation or on the way to a destination in southwestern Colorado or the Four Corners area. Visitors are drawn to this area by the scenery, and other attractions such as Mesa Verde National Park, the Durango-Silverton Narrow Gauge Railroad, and the historic mining towns of the high country **(Figure 1)**. Colorado visitors rated "being close to the mountains and visiting natural parks or forests", as significantly important in their decision to visit the Rockies. The nature/mountain/

wilderness experience, rest/ relaxation, climate and accessibility are the major reasons in the decision to come to the area (Romero). Sightseeing and visiting scenic attractions are the strongest activity preferences of visitors to the area **(Figure 2)**. These activities also constitute the highest desired characteristic of a vacation destination **(Figure 3)**. As the Skyway becomes known as a major recreation destination, the user will likely come with the objective of experiencing the Skyway but will still visit other attractions in the area. Other types of users are four-wheel drive enthusiasts, skiers (both downhill and cross-country), trail users, bicyclists, and the tour participant.

The majority of the visitors to the area travel in family parties averaging 3.5 people per vehicle, in automobiles, light trucks, or RV's **(Figure 4 & 5)**. One-fourth are camping while almost half stay in lodging in towns (Romero). Most parties include children and a good percentage have adults 30-50 years old **(Figure 4 & 6)**. The majority of visitors have a relatively high education, with over 80% having attended college or university and most are in the middle to upper middle income range **(Figure 7 & 8)**. The visitors' primary origin is from within Colorado as well as neighboring states of the west, with a significant percentage from Texas and California **(Figure 9)**. The largest percentage of occupation groups were professional/executives with also a significant representation of retired individuals **(Figure 10)**. The majority of visitors are in the area for the first time **(Figure 11)**. Recently, a few ventures have begun to market the route as a scenic tour, including some national groups.

Use levels on the byway range from over 13,200 average daily traffic (ADT) in Durango to 800 ADT near Lizard Head Pass. The highway use is increasing 4.2 percent per year average since 1982 **(Figure 12)**. The average ADT for 1988 was 3370. Other indicators of use trends within the Skyway influence zone would be visitation of Mesa Verde National Park with an average yearly increase of 7.3 percent in the past ten years **(Figure 13)**, and use of the Durango-Silverton Narrow Gauge Train, which has had about a five percent increase per year since 1981 **(Figure 14)**. Because of the severe conditions, winter use levels are low except for the Skyway sections leading to the ski resorts of Purgatory and Telluride and U.S. Highway 160 between Cortez and Durango. The entire route is maintained in the winter. Use levels will remain high and probably increase as the Skyway becomes better known as a total recreation experience.

C. *NEPA COMPLIANCE AND POLICY DIRECTION*

The San Juan Skyway is consistent with the objectives and direction of the Land and Resource Management Plans of the two management units of the San Juan and Grand Mesa, Uncompahgre, and Gunnison National Forests 1983. The Forest Land and Resource Management Plans of both Forests are defined as *completed NEPA documents*. Both Forest plans give prescription emphasis of "Roaded Natural" (Regional Standard Management Prescription "2B"), which is a management strategy to maintain and enhance the recreation activity of "Driving for Pleasure". Because of the magnitude

Weighted Prefrence of Activities of Visitors to Southwest Colorado

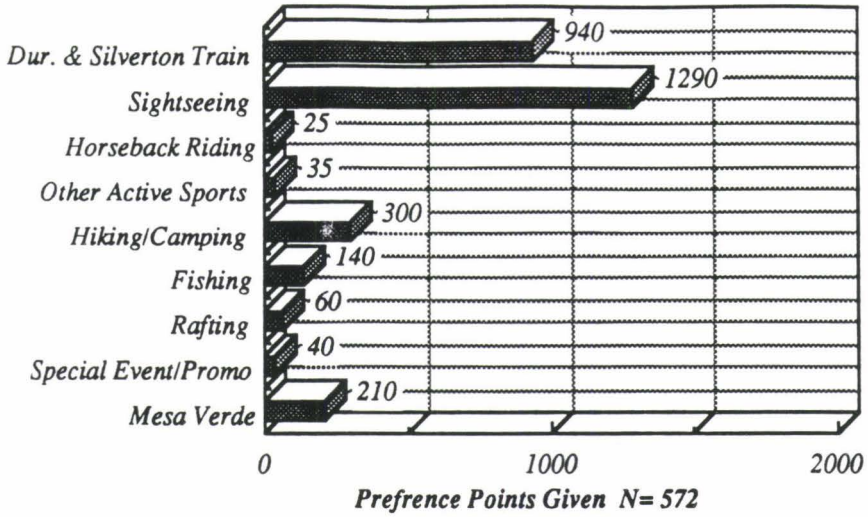

Figure 1

Source:
Romero-Leone, 1987

Vacation Destination Desirability

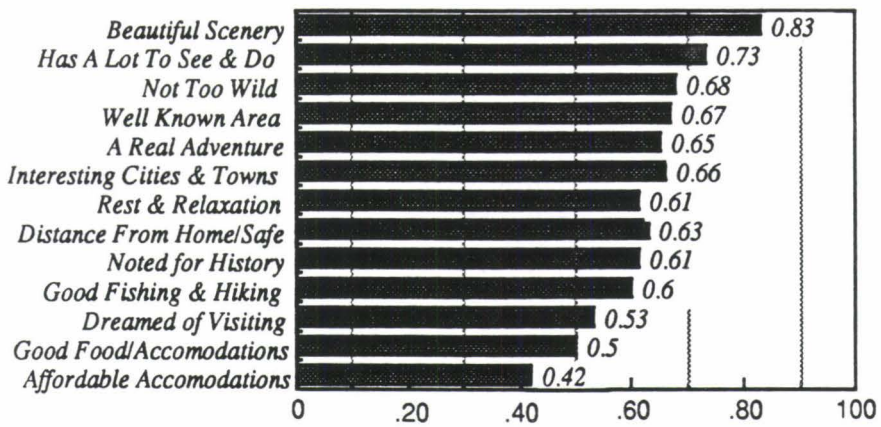

Figure 2

Source:
Longwoods Research Group
LTD, 1988

Characteristics of Desirable Vacation Destination in Colorado

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Percent of Parties Participating in Various Activities

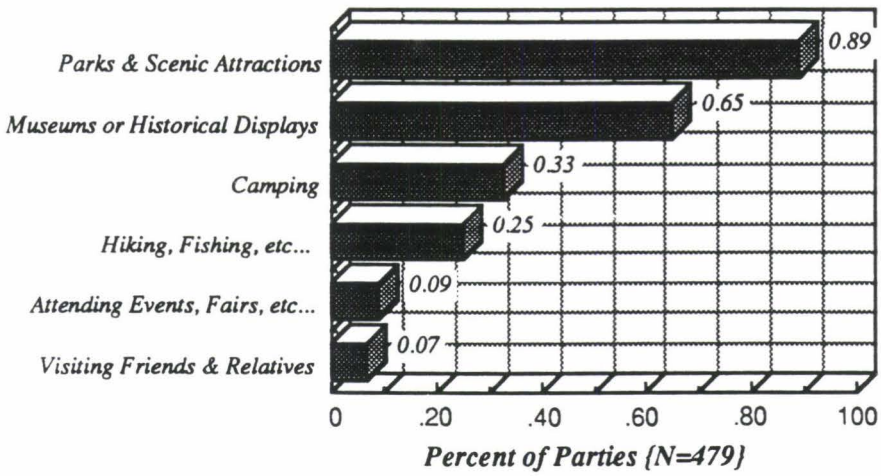


Figure 3

Source:
Romero-Leone, 1987

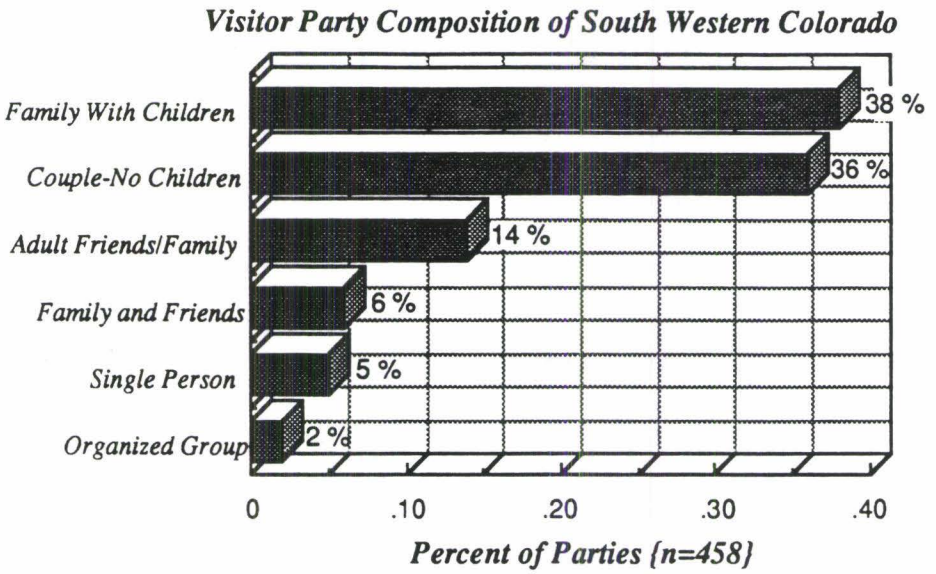


Figure 4

Source:
Wood Bay Consulting
Group LTD, 1988

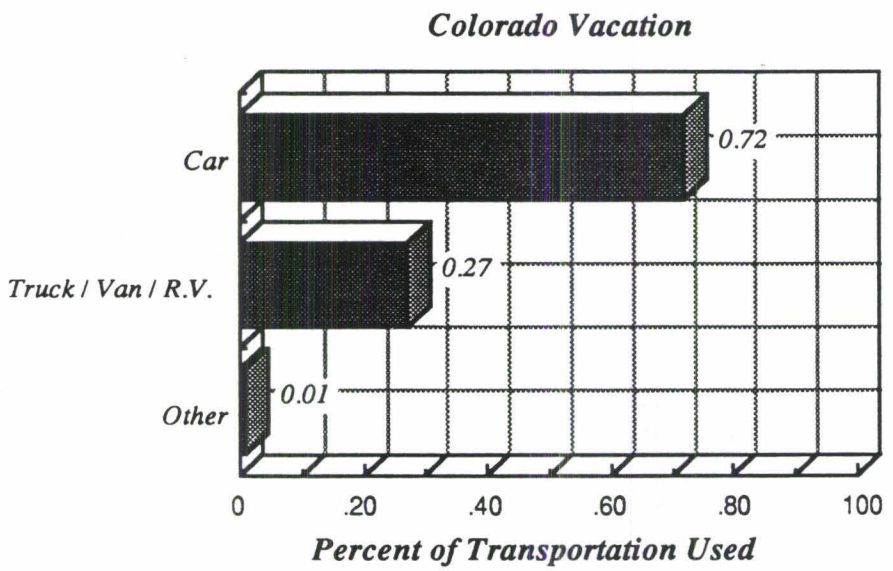


Figure 5

Source:
Longwoods Research Group
LTD, 1988

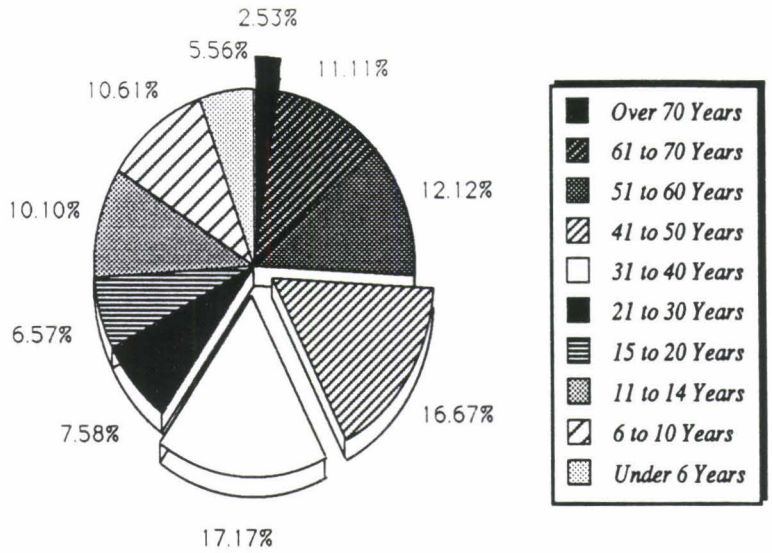
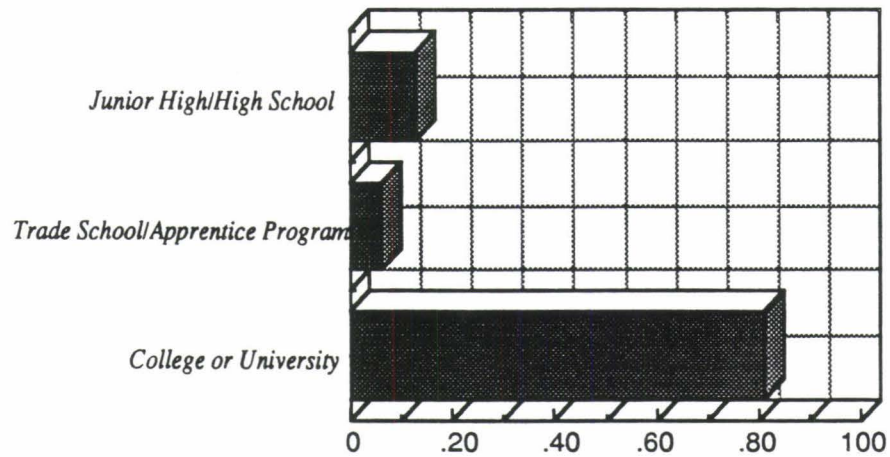


Figure 6

Source:
Wood Bay Consulting Group
LTD, 1988

Visitor Party Age Categories in South Western Colorado {n=480}

Educational Level of Respondent

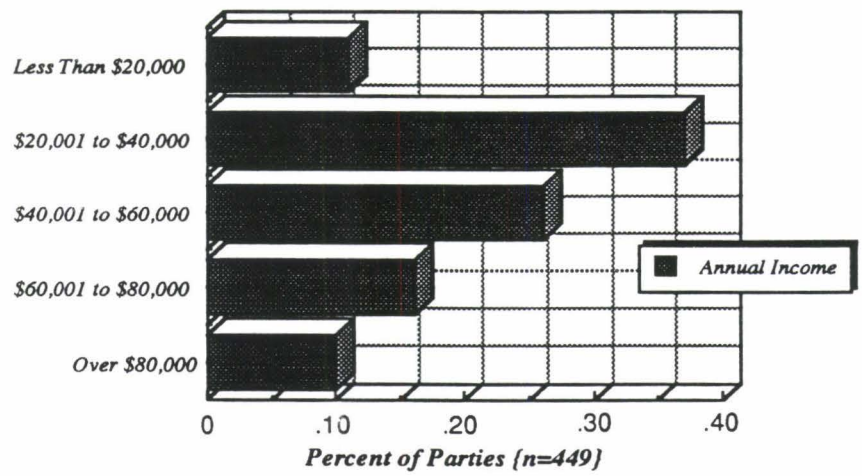


Percent of Respondents {n=469}

Figure 7

Source:
Wood Bay Consulting Group
LTD, 1988

Annual Household Income of Visitors to South Western Colorado



Percent of Parties {n=449}

Figure 8

Source:
Wood Bay Consulting Group
LTD, 1988

State of Origin of Visitors to South Western Colorado

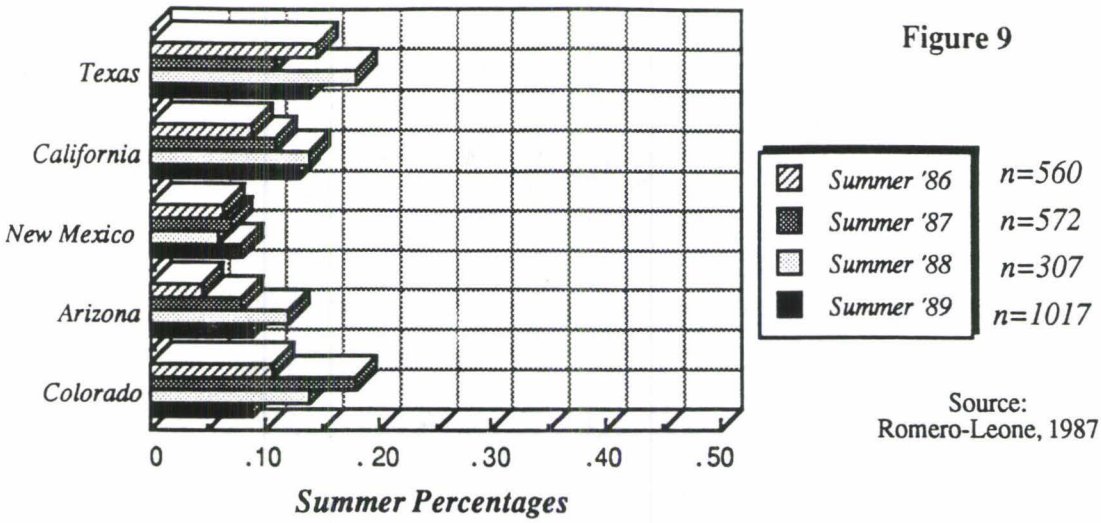


Figure 9

Source:
Romero-Leone, 1987

Occupation Comparison of Visitors to South Western Colorado

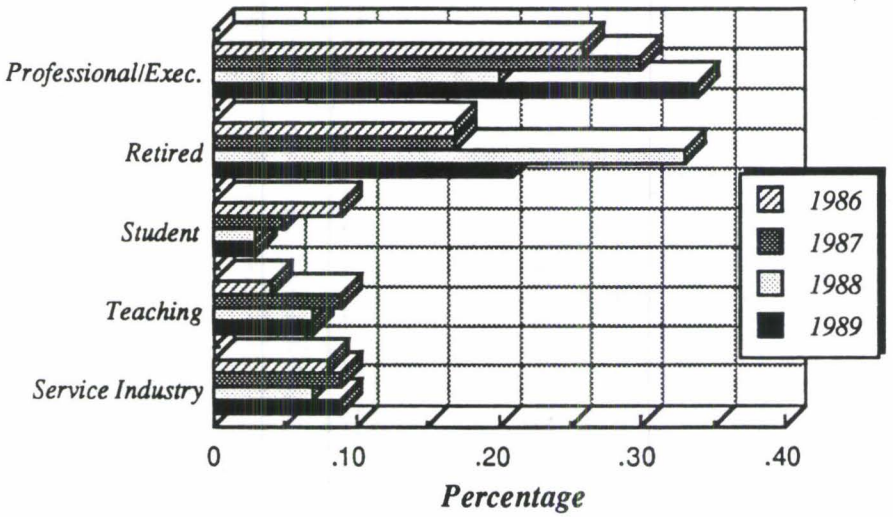


Figure 10

Source:
Romero-Leone, 1987

Visit Frequency to South Western Colorado

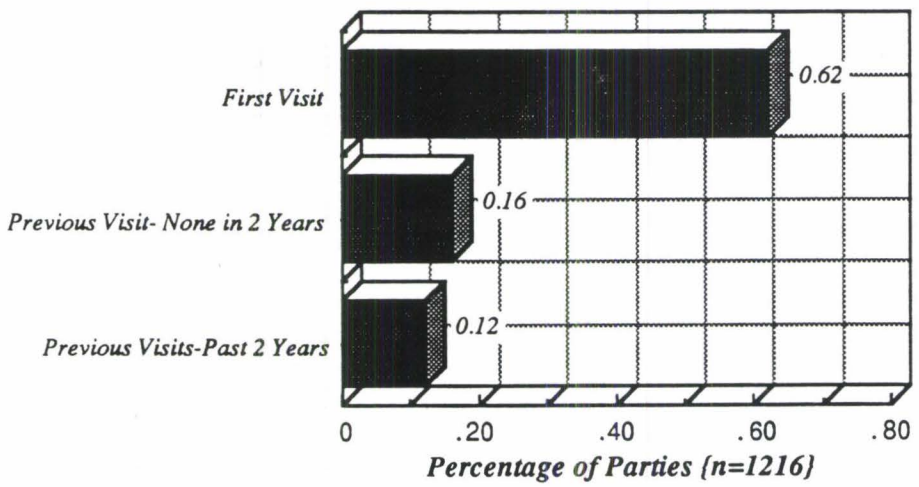
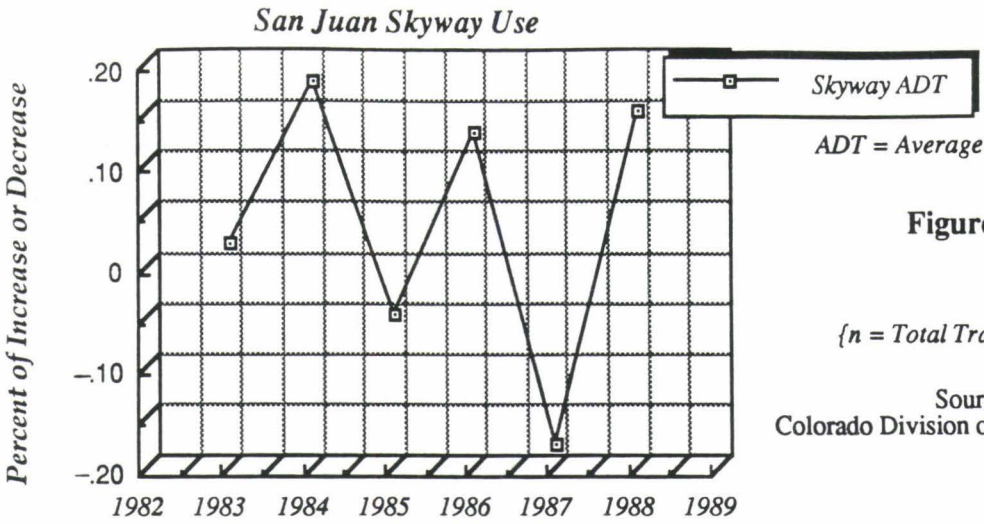


Figure 11

Source:
Wood Bay Consulting
LTD, 1988

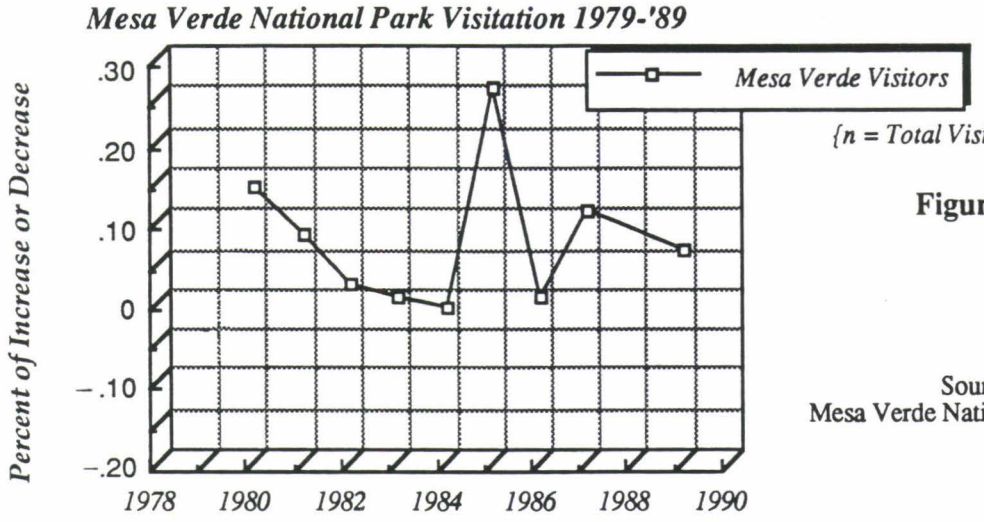


ADT = Average Daily Traffic

Figure 12

{n = Total Traffic Count}

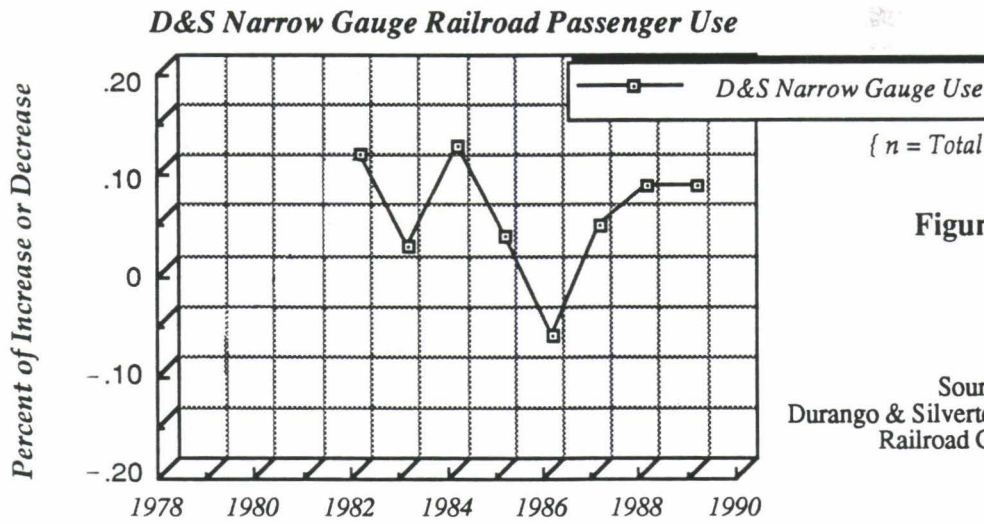
Source:
Colorado Division of Highways, 1990



{n = Total Visitor Day Use}

Figure 13

Source:
Mesa Verde National Park, 1990



{ n = Total Passengers }

Figure 14

Source:
Durango & Silverton Narrow Gauge Railroad Co., 1990

of the project, it is anticipated that an "NEPA" document (Environmental Analysis or Categorical Exclusion) will be executed prior to construction on each of the sites or possibly cover all sites on the entire Skyway.

The majority of the sites, when constructed, will not pose any significant environmental impacts. The site plans suggest that the development be adjacent to the highway and usually be constructed on the road fill. The improvements will not adversely impact the natural resources of the area. In most cases, the additions will improve the appearance of the existing roadside. The size of the largest site plan (EXPANDED PLAN), is about 60' X 240' or 14,400 square feet, which would not constitute a major disturbance in the author's opinion.

The following **policies and plans** reflect current direction in regard to the Skyway and its future planning and development.

1) Forest Service Manual: 1600, 1660, 2330, and 2390
2) San Juan National Forest Recreation Strategy, 1988
3) San Juan National Forest Strategic Mgt. Vision for the 1990's (draft)
4) Forest Land and Resource Management Plans for the San Juan and Grand Mesa, Uncompahgre, and Gunnison National Forests, 1988
5) WO Task Force on Scenic Byways Criteria and Definitions, 1988

D. *OPERATIONS/MAINTENANCE*

All facilities will be designed to be relatively maintenance free. The basic construction material suggested is concrete. The highways are maintained year-round, but the sites that may be developed in the high country will obviously not be accessible because of the heavy snows. Interpretive sign exhibits should be designed so that they can be removed and stored at the end of the heavy use season in the fall. Snowplowing may be needed for sites that are popular for cross-country skiing and snowmobiling. Routine maintenance would consist of cleaning of the toilets and incidental trash pickup. Snowplowing will need to be coordinated with the property owners or the Highway Department. Annual inspections will be needed at appropriate times. The "pack it in-pack it out" system for garbage management would work on the Skyway, but necessarily would need strong public awareness and management commitment to be successful.

Visitor centers and selected introduction points should be fully stocked with appropriate Skyway brochures, maps, and handout information at all times during the heavy use season (late spring to mid fall). There may be partnerships, or other group involvement, such as Forest Interpretive Associations, with certain facets of maintenance and operations of the Skyway Program. There may also be a need to develop a comprehensive operation and maintenance (O&M) plan in the future.

Because of the varied land ownership along the route, the actual land ownership of several sites are in question. It will be necessary to research the ownership and easement status of all lands in question and take the steps to make site development possible. In the event that a site is in private ownership, cities, counties or interest groups will be needed to initiate the development of the proposals. The Forest Service will serve in an advisory role in these cases, and will provide leadership in the designing and engineering necessary to construct the site. It will be very important that the themes and site design continuity be maintained in all cases, whether it be government or private.

E. *SITE EVALUATION PROCESS*

After the initial inventory of all potential sites was compiled, each was weighed against the following list of selection criteria. The list was then further refined by the Bi-Forest (San Juan, Grand Mesa, Uncompahgre, and Gunnison National Forests) Ranger and Supervisor groups.

CRITERIA

1. Interpretive Relevance

- does it offer a significant interpretive message?
- does the interpretive story fit with a significant resource?
- does it complement or conflict with other sites?
- can the message(s) be projected successfully by a sign or other interpretive means?
- is the message unique? is there a story or just information?
- does it complement the total Skyway experience and image?

2. Physical Development Feasibility

- is there adequate room for a facility here?
- what is the alignment of the highway at this point?
- will it be safe in terms of access and egress? (speed, traffic density, alignment, average daily traffic)
- can other facilities be constructed here? (i.e. toilet, trail)
- does the scenery merit a stop?
- if it will require snow removal, is there a place to store snow?
- are there any obvious construction problems? (wet area, slope, etc.)
- is there a need for retaining wall work? is that feasible?
- probability of the site needing deceleration/acceleration lanes?
- proximity to the last interpretive pull off.

3. Scenic Appeal and Setting

- variety of the landscape (water, vegetation, rock form, terrain,)
- any unique/outstanding landscape features? (waterfall, cliffs)
- what are the views? can they be improved by tree removal/planting?
- will the change of seasons feature anything different?
- any opportunity to view wildlife, or fish?
- provide access to other recreation attractions or activities?
- any variable factors evident? (motion, light, season, distance)
- any "dominance principles" evident? (enframement, convergence, axis)

In weighing all sites with the criteria, it became apparent that some did not meet the criteria well. Many were eliminated at that point. However, there were some that rated very strong in one area with weaknesses in another area. If the strength was in interpretive value and importance, it often stayed on the list with a given that the development of the site would require certain mitigating measures during construction. An example might be Bear Creek Falls where the feature is a dramatic waterfall but the traffic access and egress is very poor. Elimination of this site would be a poor decision based on current public use and popularity. There will have to be creative design and engineering to make the site functional and safe. Some sites may require retaining walls, tree removal, or parallel parking to make them useable. Others may require parking located in a different location but in close proximity to where the visitor could walk or wheelchair to a viewing deck. There may be some unforeseen problems as planning progresses that may substantially alter or eliminate some sites completely.

After the total inventory of potential sites were weighed and some eliminated by the above criteria, the districts were again given the opportunity to comment on the final selection. That list was then reviewed by the five member Bi-Forest Skyway Steering Committee and further refined. The sites were then rated as High, Medium, and Low, in regard to their importance for development.

F. *INTERPRETIVE SUBJECT DEVELOPMENT*

The Skyway traverses a very rich historical region that has many unique and fascinating stories waiting to be told. Some of the most interesting stories are a result of the early settlement, railroads or prehistoric occupation of the area. There is also a large amount of natural history that will be of interest to the public.

For the purposes of this paper and for the recommendations for interpretive stories, the following is a listing of significant cultural and natural resources that could be organized into a major theme or themes in the future.

1. Cultural History of the Skyway Area

- archaic and historic occupation
- exploration of the area (expeditions, traders, pioneers, prospectors)
- transportation of the area (trails, railroad, pack trains)
- settlement (mining, ranching, agriculture, industry)
- 20th century (resource uses and management, land uses)
- unique historical stories

2. Natural History of the Skyway Area

- geomorphology (geology, glaciation, volcanic, soils, terrain)
- weather and climate (avalanche, snowpack, temperature, moisture)
- vegetation and wildlife (diversity, special species, big game, tree species, fish, and birds)
- water forms (lakes, ponds, rivers, and streams)

These significant resources listed under, **Cultural History, and Natural History**, will serve as the framework for interpretation of the Skyway. They will be used in the development of the theme(s), given more maturity in the interpretive planning process of the future. It is important that the "major theme(s)" be developed in concert with appropriate Forest staff and other agencies. The author recommends that the "major theme(s)" be developed in consideration of the above-listed significant resources. The theme may be stated in a single statement or even possibly a number of brief statements as a result of possible corridor segment identification. They should generally and briefly be the identity of the significant resources of route.

The information noted in the INTERPRETIVE SUBJECT(S) under the SITE DEVELOPMENT DESCRIPTIONS section was a result of site specific research, and can serve the basis for the final interpretive stories for the sites. Each site has a subject generally related to that location; however, each of these specific stories could fit within the broad theme category. The following INTERPRETIVE PLANNING CONCLUSIONS AND ASSUMPTIONS are a result the literature review and research and were used in the organization of the information stated under the INTERPRETIVE SUBJECT(S). It will also aid in the development of the final interpretive story development.

INTERPRETIVE PLANNING CONCLUSIONS AND ASSUMPTIONS

1) Few visitors recognize the difference between the Forest Service, Park Service, and the Colorado Division of Wildlife. Many have little or no understanding of what the management missions are. There are also many misconceptions. In keeping with the objectives and goals of the scenic byway program there is a need to note the distinction where possible.

2) While most tourists generally attempt to adhere to a planned itinerary, they desire information orienting them to the region and its recreational opportunities. They also are willing to change that itinerary if they feel that it is worthwhile. This would tell us, at least in part, that introduction and information is critical at the entry points to the Skyway.

3) Many tourists are probably unaware of the San Juan Skyway at this time, and are in the area to visit the ruins of Mesa Verde National Park, ride the narrow gauge train, or visit the high mountain towns of Silverton, Ouray, and Telluride. This would tell us that not only information but also promotion will be an important part of the Skyway development and management program.

4) Most visitors are more interested in cultural history of the area than facts of physical features, i.e., most would enjoy the story of Butch Cassidy's bank robbery in Telluride more than geological strata identification of a high alpine cirque basin. This would suggest that the interpretive approach and final stories be carefully developed to provide experiences and appreciation rather than just information. What do we want the visitor to take home with them as a result of driving the Skyway?

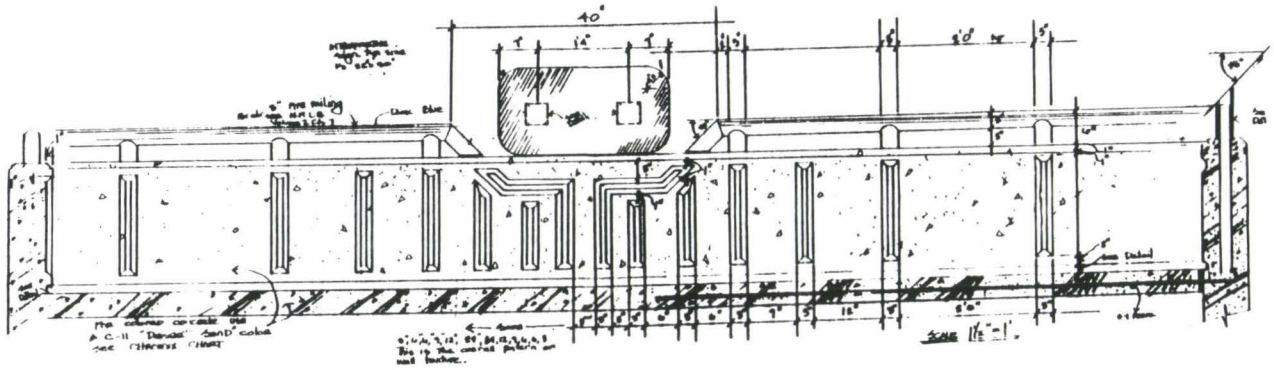
5) At any interpretive site, the vast majority of visitors will place a higher value on an emotional experience than on an intellectual experience. This relates to No.4.

G. *SITE DESIGN PHILOSOPHY AND APPROACH*

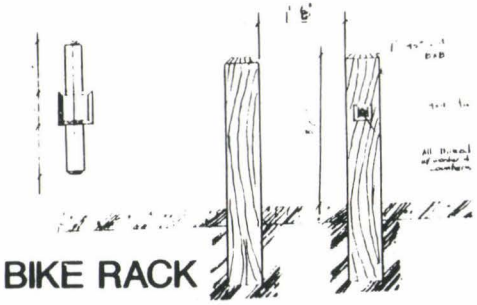
The plans can be repeated from one site to another, will facilitate the interpretive intent of the site, yet will aesthetically fit the landscape. It should be noted that these designs are preliminary at this stage and may be adjusted or modified to better complement the interpretive themes and stories in different sites.

The **"STANDARD PLAN"** as illustrated in *Exhibit "A"* will provide for parking for up to five cars and two RV's at the site. The viewing deck will accommodate about 15 to 25 people at one time and will include two benches and one or two interpretive signs as needed. An example of the application of this plan is shown as *Exhibit "B"* - Shalona Lake Overlook, *Exhibit "C"* - Purgatory/La Plata Mts. Overlook, and *Exhibit "E"* Expanded Plan Perspective Sketch (also note Project Site Development Descriptions pages 22 and 25).

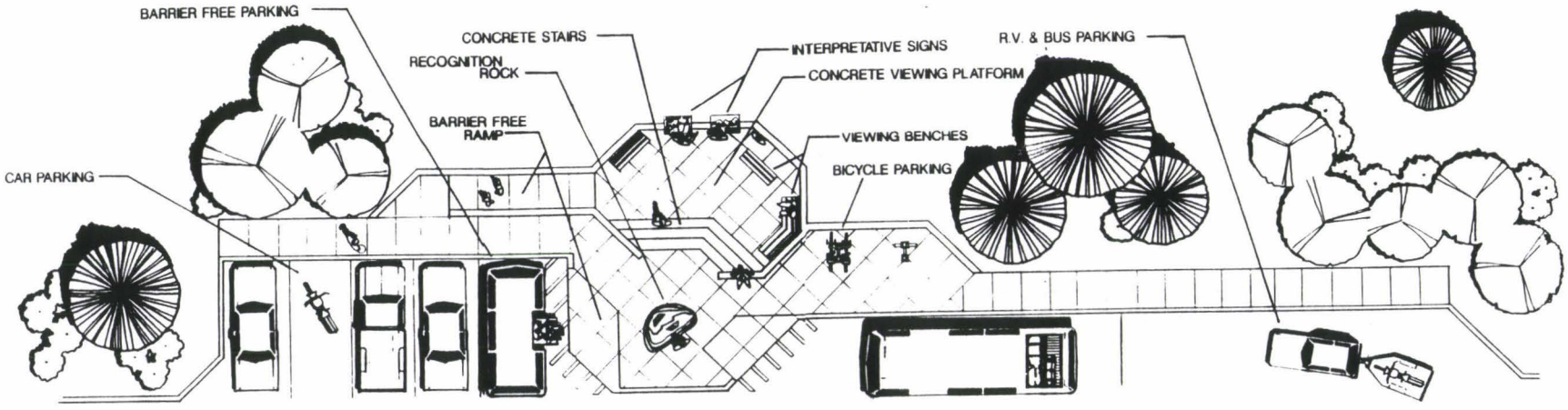
An **"EXPANDED PLAN"** *(Exhibit "D")* will have essentially the same layout as a standard deck but will be larger to facilitate 30 to 40 people at one time; parking for eight cars and three RV's will be furnished at the site. The viewing area would have up to three benches and a number of interpretive signs. An example is shown as *Exhibit "F"* - Ironton/Corkscrew Gulch Point of Interest. (Note also page 35).



WALL ELEVATION DETAIL



BIKE RACK

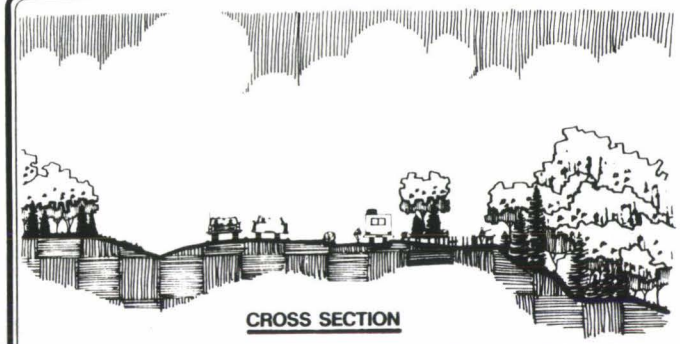


STANDARD PLAN

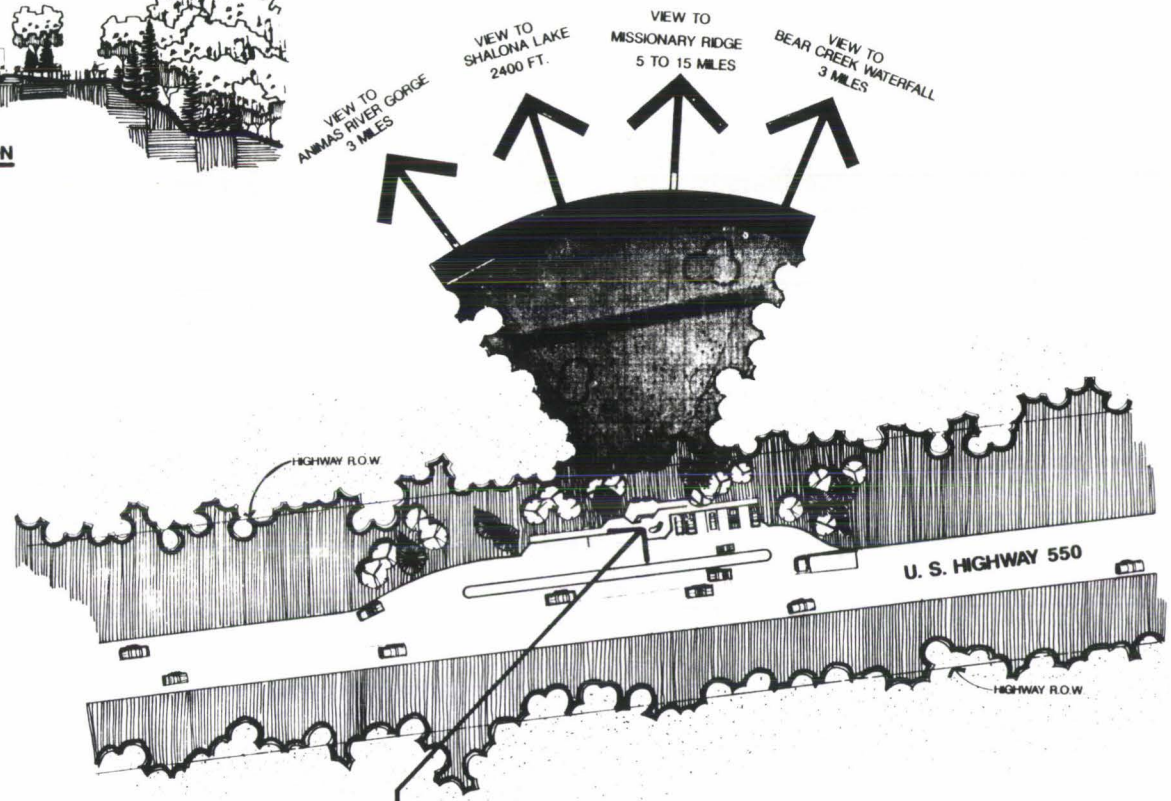
STANDARD SITE

REVISIONS

EXHIBIT A



CROSS SECTION


VIEW TO ANIMAS RIVER GORGE 3 MILES
VIEW TO SHALONA LAKE 2400 FT.
VIEW TO MISSIONARY RIDGE 5 TO 15 MILES
VIEW TO BEAR CREEK WATERFALL 3 MILES
HIGHWAY R.O.W.
U. S. HIGHWAY 550
HIGHWAY R.O.W.

OVERLOOK ELEMENTS

- BARRIER FREE ACCESS FROM PARKING TO VIEW AREA.
- INTERPRETATIVE SIGNS & BENCHES
- 9 PARKING STALLS
- 2 R.V. PARKING STALLS
- COOPERATIVE RECOGNITION ROCK

NORTH
SCALE 1" = 50'

SHALONA LAKE OVERLOOK

STANDARD PAD

SHALONA LAKE OVERLOOK

REVISIONS
NO. DATE

DESIGNED R. DUSTIN 2-12-96
DRAWN R. DUSTIN 2-12-96
CHECKED R. DUSTIN 2-12-96

RECOMMENDED
F.S. LANDSCAPE ARCHITECT

APPROVED
DISTRICT RANGER
FOREST ENGINEER
FOREST SUPERVISOR

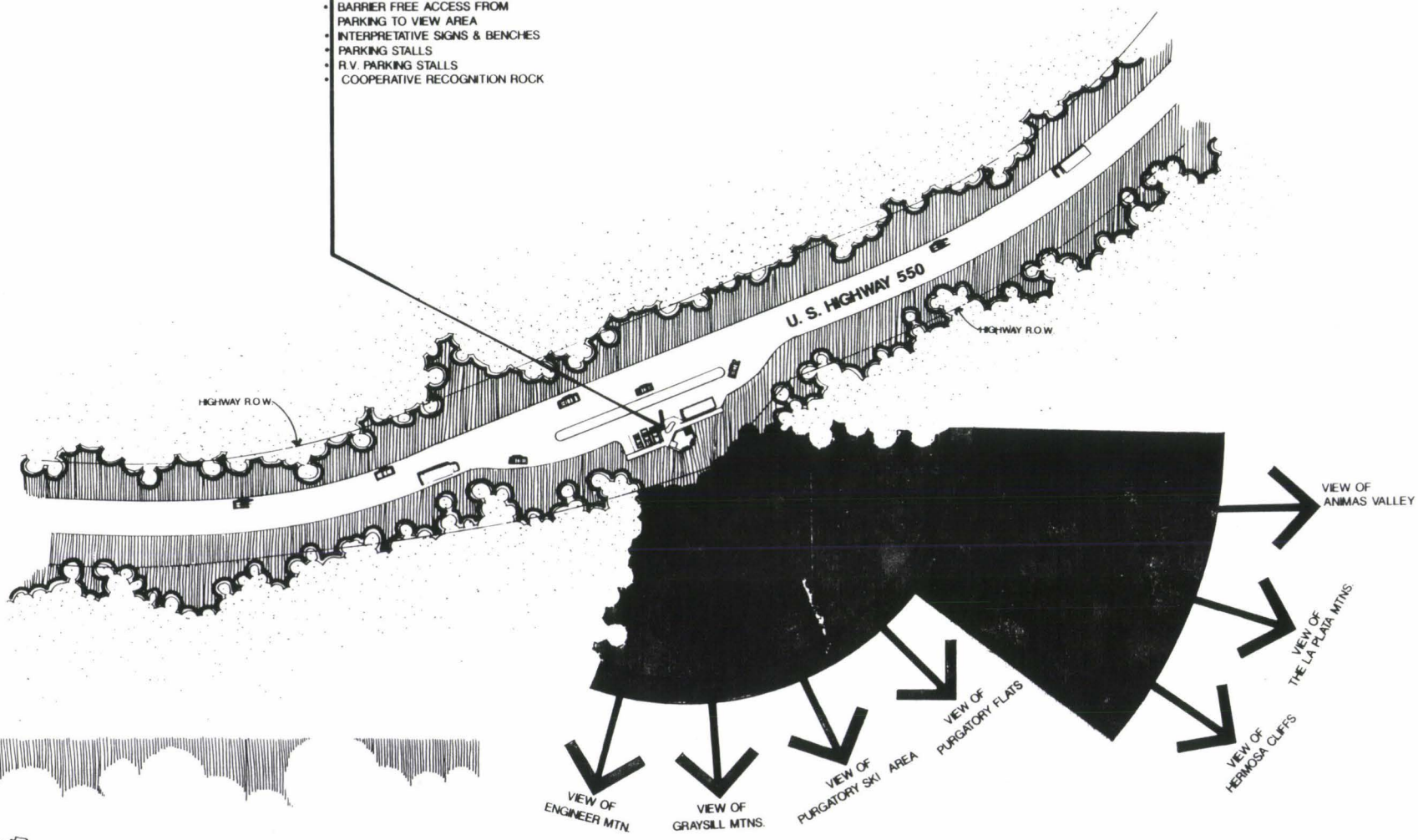
TEAM

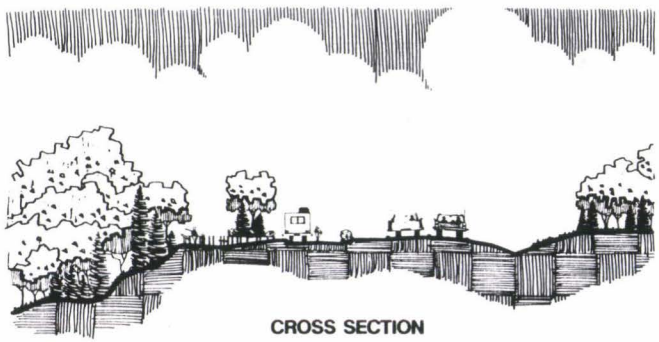
SAN JUAN SKYWAY

EXHIBIT B

OVERLOOK ELEMENTS

- BARRIER FREE ACCESS FROM PARKING TO VIEW AREA
- INTERPRETATIVE SIGNS & BENCHES
- PARKING STALLS
- R.V. PARKING STALLS
- COOPERATIVE RECOGNITION ROCK





CROSS SECTION

STANDARD PLAN

NORTH

SCALE 1" = 50'

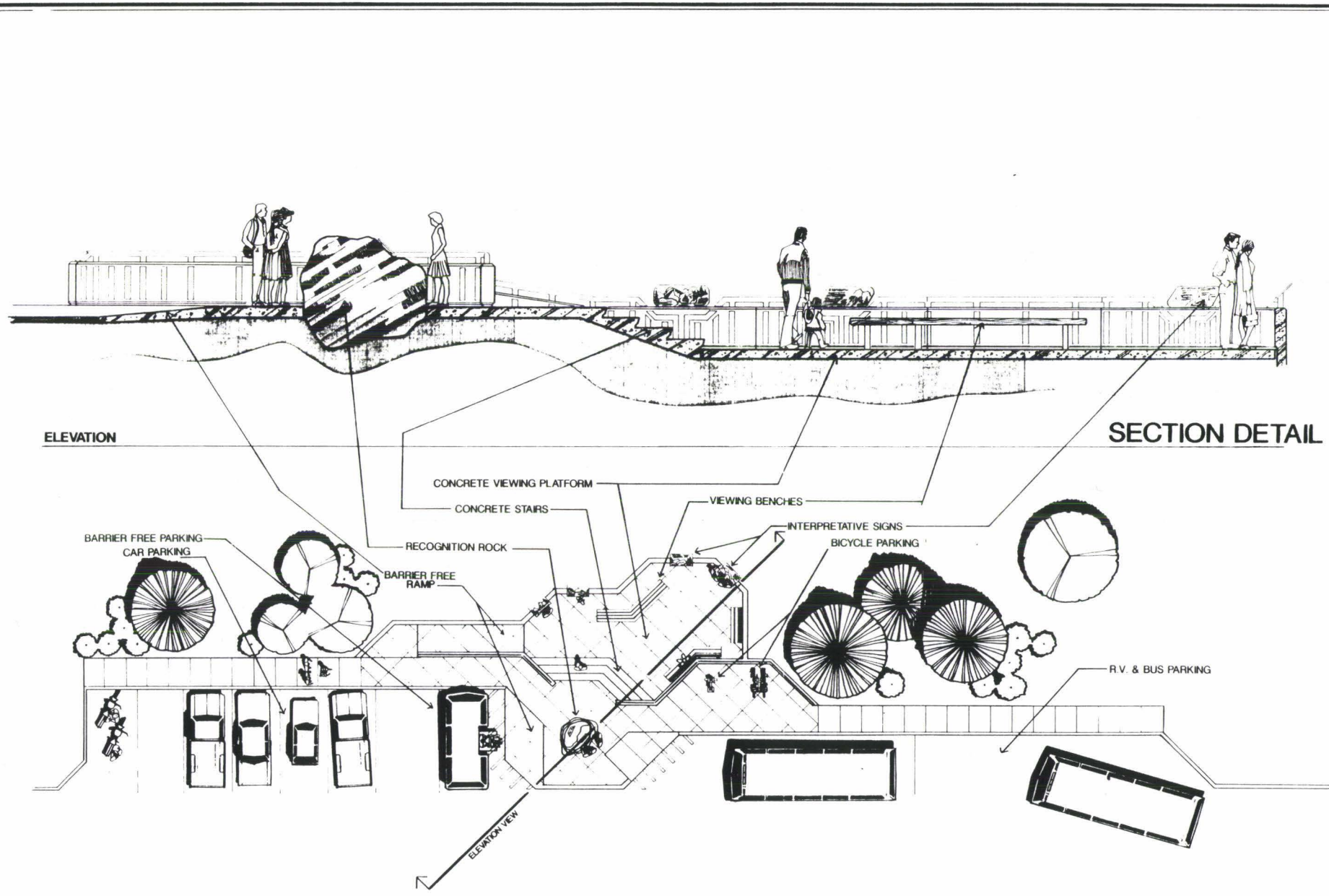
PURGATORY / LAPLATA MTS OVERLOOK

REVISIONS

DESIGNED
DRAWN
CHECKED
RECOMMENDED
F.S. LANDSCAPE ARCHITECT
APPROVED
DISTRICT RANGER
FOREST ENGINEER
FOREST SUPERVISOR
DATE

DESIGN TEAM

EXHIBIT C



REVISIONS
NO. DATE

DESIGNED
DRAWN
CHECKED
DATE

RECOMMENDED
F.S. LANDSCAPE ARCHITECT

APPROVED
DISTRICT RANGER
FOREST ENGINEER
FOREST SUPERVISOR

TEAM

EXHIBIT D

REVISIONS
BY DATE

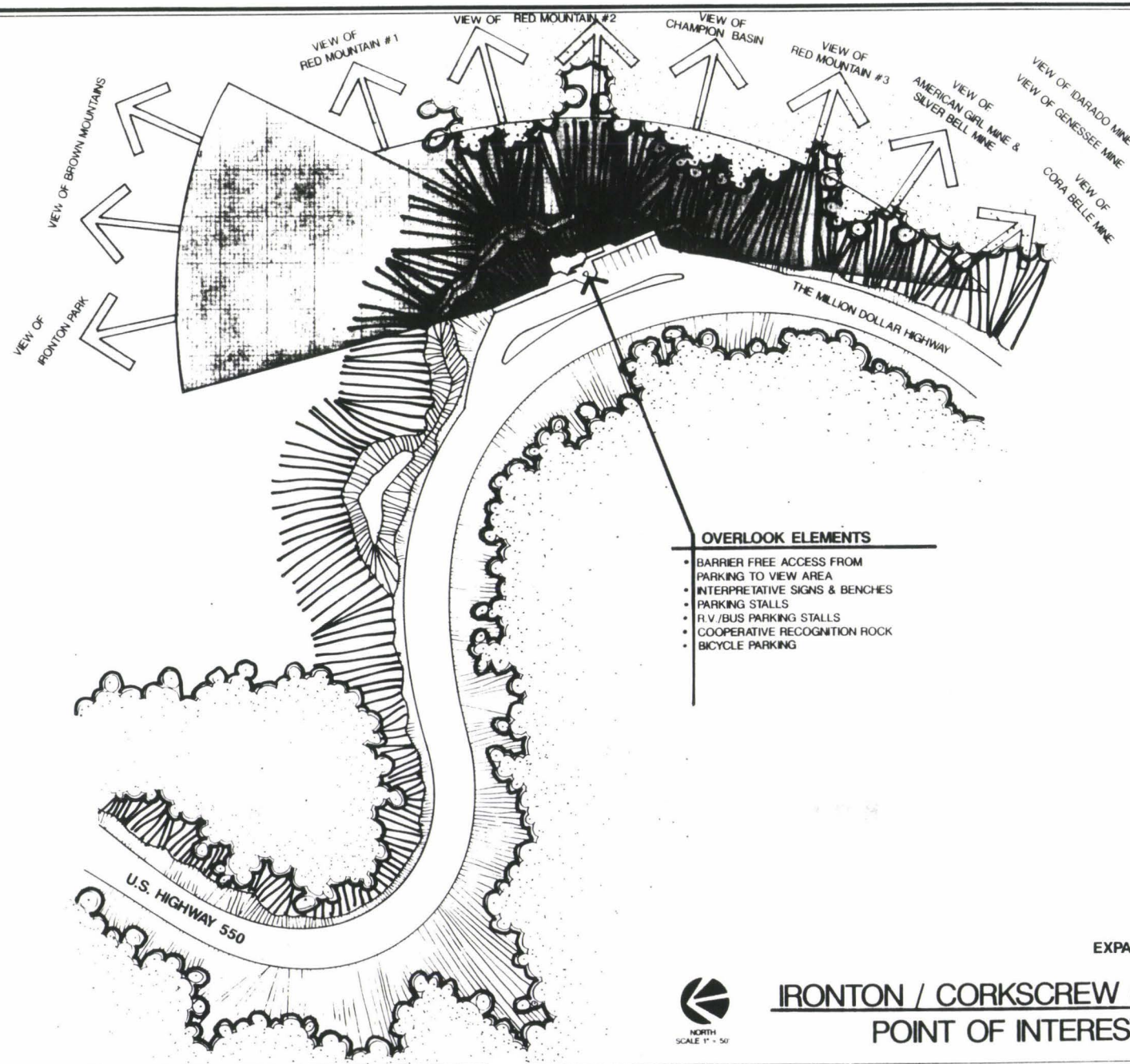
DESIGNED
DRAWN
CHECKED
DATE

RECOMMENDED
F.S. LANDSCAPE ARCHITECT

APPROVED
DISTRICT RANGER
FOREST ENGINEER
FOREST SUPERVISOR

Design TEAM

EXHIBIT E


VIEW OF BROWN MOUNTAINS
VIEW OF IRONTON PARK
VIEW OF RED MOUNTAIN #1
VIEW OF RED MOUNTAIN #2
VIEW OF CHAMPION BASIN
VIEW OF RED MOUNTAIN #3
VIEW OF AMERICAN GIRL MINE & SILVER BELL MINE
VIEW OF IDARADO MINE
VIEW OF GENESSEE MINE
VIEW OF CORA BELLE MINE
THE MILLION DOLLAR HIGHWAY
U.S. HIGHWAY 550
OVERLOOK ELEMENTS
• BARRIER FREE ACCESS FROM PARKING TO VIEW AREA
• INTERPRETATIVE SIGNS & BENCHES
• PARKING STALLS
• R.V./BUS PARKING STALLS
• COOPERATIVE RECOGNITION ROCK
• BICYCLE PARKING
NORTH
SCALE 1" = 50'
EXPANDED PAD
IRONTON / CORKSCREW GULCH
POINT OF INTEREST

IRONTON / CORKSCREW GULCH POINT OF INTEREST

REVISIONS

RECOMMENDED
APPROVED

EXHIBIT F

Common to both of these plans is a staging area in the walkway between the parking areas. Within the staging area, the design provides for a large (one and a half yard) landscape rock sunk partially into the concrete that would have a plaque attached giving credit to the partnership(s) responsible for the facility construction.

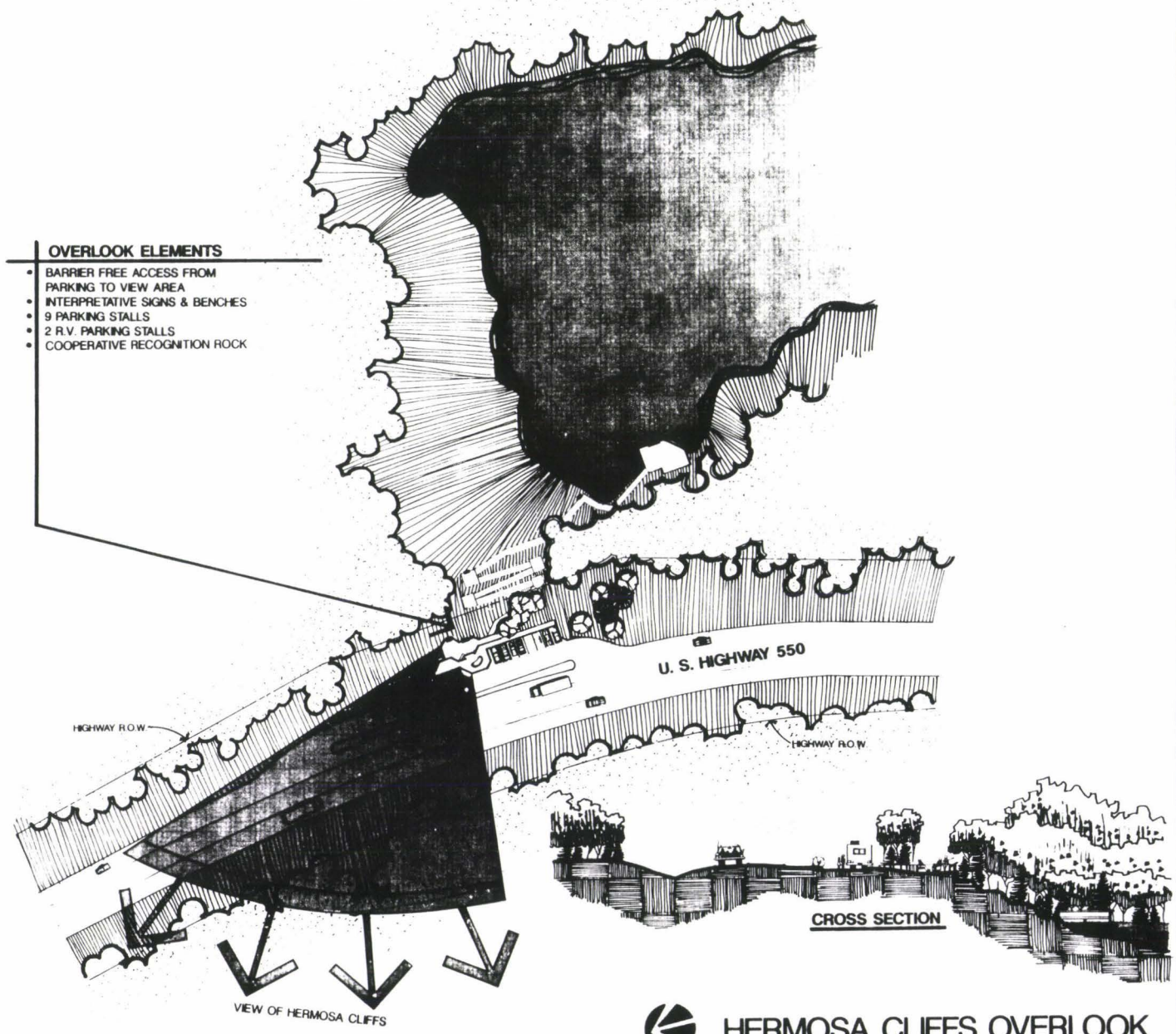
There are some sites that will have a variety of other facilities provided or may have some construction feasibility problems. These are called **"ATYPICAL PLANS"** and will need specific site designs provided for them. These may include one of the three "plans" and will provide other facility amenities such as toilets, picnic areas, trailheads, nature trails, etc. An example of this plan is included as *Exhibit "G"* - Hermosa Cliffs Overlook. On these sites, there will be elements of the "STANDARD or EXPANDED" designs incorporated into the plans.

Some STANDARDS that were considered in the development of the design concepts are as follows: The number of people that each PLAN facilities has been arrived at by consideration of present use of sites currently used as turnouts and in consideration for future use. The size of each viewing deck is derived by the estimated number of people at one time, providing for ten (10) square feet per person standing or twenty (20) square feet per person sitting down. Other improvements such as curbs and retaining/dividing walls and bicycle racks, and steps/ramps, will be incorporated into the site plan as indicated in the above-mentioned exhibits. The author's recommendation for the interpretive sign material is a porcelain enamel that can withstand gouging with a knife or key. A special case could be used to encase the sign that will have a slip-in plexi-glass or lexan insert that may be changed annually. Nonreversible bolts and other considerations will be taken to discourage theft or vandalism. Ramps, at or below 5% grade, will access the viewing decks from the parking areas. Other provisions will also be incorporated into designs for the disabled population.

For smaller sites, a simple turnout as noted in *Exhibit "H"*, called the **"CAMERA POINT PLAN"**, would give the opportunity for a brief stop with a very simple interpretation or information sign.

The basic construction material suggested in the interpretive sites is tinted concrete because of importance of long term maintenance of the sites and anticipated level of manpower and budget that will likely be available.

The following cost estimation is used as an example and will vary for each site as shown in each project description, because of hauling distances and other variables.



HERMOSA CLIFFS OVERLOOK

EXPANDED PAD / A-TYPICAL

HERMOSA CLIFFS OVERLOOK

REVISIONS

NO.	DATE

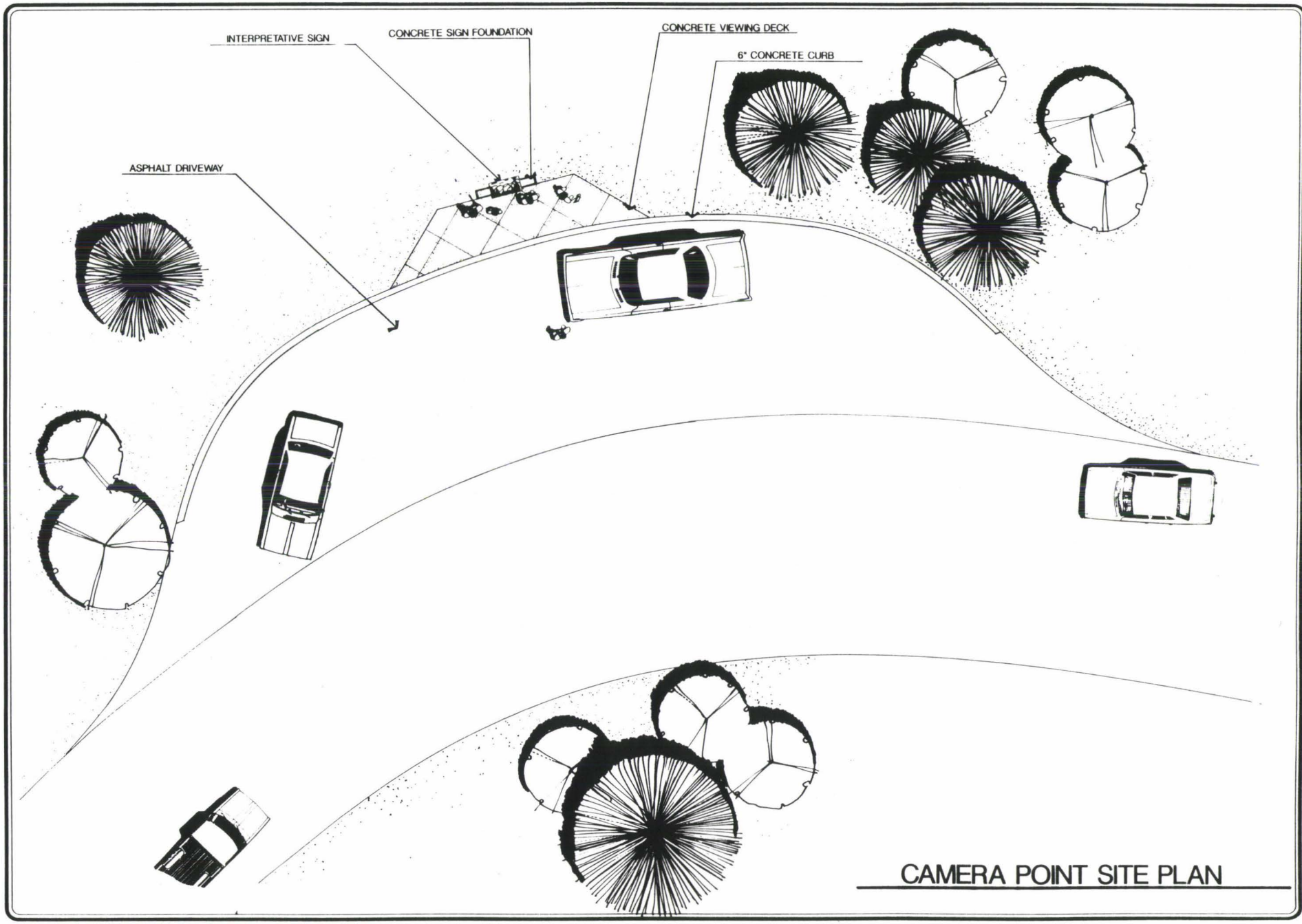
DESIGNED S. DUSTIN 2-12-96
DRAWN S. DUSTIN 2-12-96
CHECKED

RECOMMENDED
F.S. LANDSCAPE ARCHITECT

APPROVED
DISTRICT RANGER
FOREST ENGINEER
FOREST SUPERVISOR

TEAM

EXHIBIT G



CAMERA POINT SITE PLAN

REVISIONS

RECOMMENDED
F.S. LANDSCAPE ARCHITECT

APPROVED
DISTRICT RANGER
FOREST ENGINEER
FOREST SUPERVISOR

DESIGNED
DRAWN
CHECKED
DATE

TEAM

EXHIBIT H

STANDARD...(i.e., *Exhibit "A, B, C, & E"*) Average Road Costs	$ 16,700
Concrete Work Includes Walks, Stairs, Handrails, Walls, Curb, and 4" Base	$ 22,250
Two Benches @ $400 Each	$ 800
Interpretive Sign	$ 1,200
Landscape Rock W/Plaque	$ 1,200
Highway Approach Signs	$ 600
TOTAL	**$ 42,750**
EXPANDED...(i.e., *Exhibit "D & F"*) Average Road Costs	$ 24,000
Concrete Work Includes Walks, Stairs, Handrails, Walls, Curbs, & 4" Base	$ 25,000
Three Benches @ $400 Each	$ 1,800
Three Interpretive Signs @ $1,200 Each	$ 3,600
Landscape Rock W/Plaque	$ 1,000
Highway Approach Sign	$ 600
TOTAL	**$ 56,000**
CAMERA POINT....(i.e., *Exhibit "H"*)	
Average Road Costs	$ 2,160
Concrete Work Incl. Pad And Curb	$ 3,800
Interpretive Sign	$ 1,200
Highway Approach Signs	$ 600
TOTAL	**$ 7,760**
ATYPICAL - Optional Elements.....(i.e., "*Exhibit G*")	
Hilficker Retaining Wall 6'X 100'	
$15 Average Cost/Facial Sq.Ft.	$ 10,300
STANDARD	$ 42,750
EXPANDED PLAN	$ 56,000
Surfaced Trail $15 Average Cost/Lin. Ft. 5' Wide	varies
Picnic Table	$ 800
Physically Challenged Two-unit Toilet	$ 24,000
Walk-In Viewing Deck	$ 5,000
Trailhead Orientation Sign	$ 1,000
Handrail @ $30 Lin. Ft.	varies
Miscellaneous Small Trail Interpretive Signs (Ea.)	$ 500

H. *PAPER RECOMMENDATIONS*

Recommendations as a result of this paper are:

1. Target the project as **a "DEVELOPMENT IN EXCELLENCE"** in all facets of planning, design, and construction. Assure that in the detailed design of the sites, signing, exhibits, and promotional/informational material, **quality is the best that is professionally possible**. Budget, manpower, and future maintenance concerns should not be a constraint nor limiting criteria. Develop the Skyway to an optimum quality level and at a scale and detail that would allow it to evolve as one of the best examples of a scenic byway in America.

2. **Classify the Skyway as a "Special Area"**, somewhat like a Forest Service NRA (National Recreation Area). Its management, including promotion, operation, future planning, and maintenance, would be assigned to a Skyway Manager who would have appropriate permanent staffing level with sole responsibilities for the Skyway. The Skyway Manager would report to one of the Forest Supervisors.

3. **Organize a citizen interest or action group**, such as **"The Friends of the Skyway"** that would aid in the byway's development, promotion, and future management. This could be easily made up of volunteers from the towns along the Skyway as well as various service groups that have interest in its promotion.

4. It is recommended for **garbage management**, the Skyway be operated as a **"pack it in-pack it out"** system. This program is working well on a few test Forests at this time. The program will obviously need strong initial promotion, managerial commitment, and ongoing emphasis to make it work.

VI. PROJECT SITE DEVELOPMENT DESCRIPTIONS

PRELUDE:

The following sections are broken into three parts; the "**INTERPRETIVE SUBJECT**", which gives the conceptual interpretive narratives, the "**CONCEPT**" will describe which of the above development options (STANDARD, EXPANDED, CAMERA POINT, or ATYPICAL) will be used for each of the sites, and the "**COST ESTIMATE**" which will reflect what the basic costs are for the indicated design option, i.e., site "A" with a STANDARD PLAN will cost "X" dollars.

In parenthesis after the name of the site is the indication of who would likely have the major responsibility for development and who could be the probable cooperative partners in the project. Listed after this on the title line is a priority development rating of **High, Medium (Med.) or Low** as assigned by the Forest Service Skyway Steering and Ranger Committees. Also listed underneath the title line is the Highway mile post (mp) to the nearest one-tenth of a mile (i.e., **mp 25.9**). The concept site plans are on file in the San Juan National Forest Supervisor's Office. It is felt that inclusion of these plans in this document would add unnecessary volume for the intent of review. Copies of individual concept site plans in either 24 x 36" or a reduced 8 1/2 x 11" may be obtained upon request.

The projects are indicated by the following descriptions in sequence starting from Durango and progressing counter-clockwise, going north. (Note the San Juan Skyway - Conceptual Master Plan..... *Exhibit "I"*)

-----PROJECTS-----

1. **SKYWAY INTRODUCTION SITES AND VISITOR DISPLAYS**.....(FS, TOWNS) High

CONCEPT:

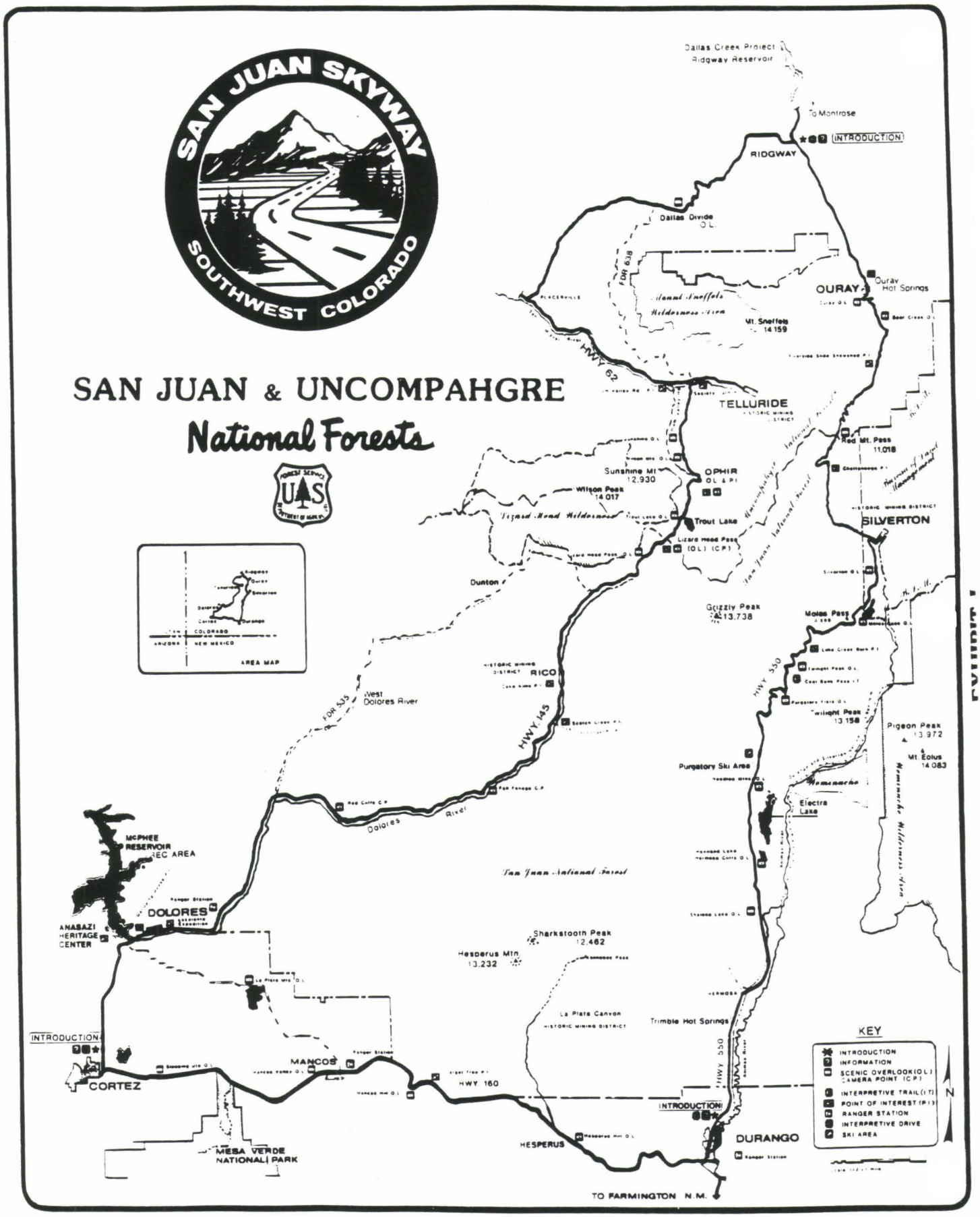
Design and development of a number of indoor displays including a Skyway map indicating "You Are Here" with an arrow. The indoor sign display would be photos, narratives, and a map in multi-color illustrations. This would be designed to be hung on a wall. These will be potentially located in Chambers of Commerce or Visitor Centers in Durango, Cortez, Ridgway, Dolores, Mancos, Ouray, Silverton, and Rico, as well as one that is portable and can be used in Skyway marketing presentations. There will be additional displays for each of the Forest Service districts. In addition to the indoor displays, four outdoor displays would be designed for use in the outdoor introduction sites. The current projects are the Colorado Welcome Center in Cortez, the intersection of Highways 160 and 550 in Durango, Ridgway Visitor's Center, and Placerville.

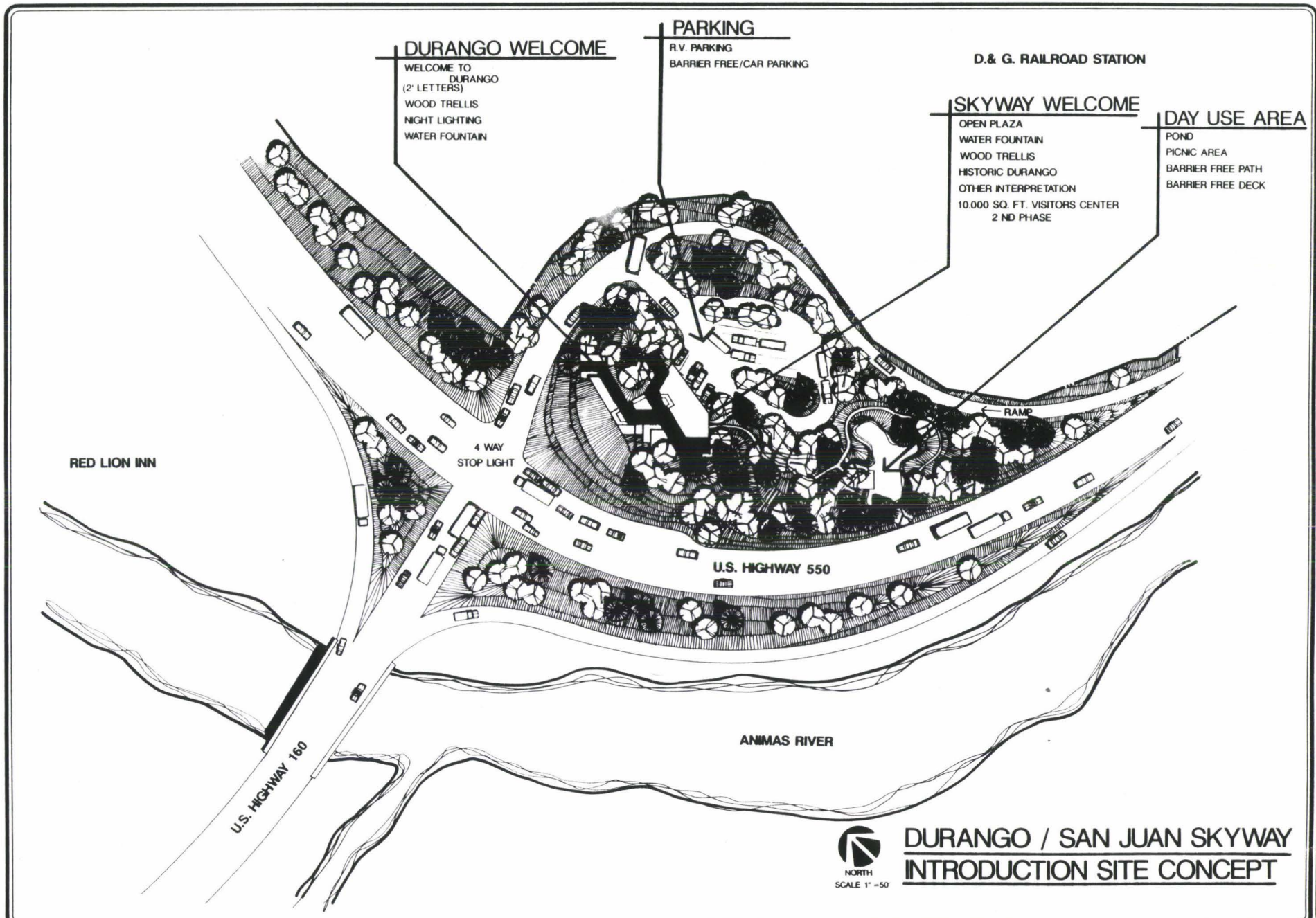
There is also a need to provide a number of miscellaneous signs that would note different features and side attractions along the route such as Purgatory Ski Area, Anasazi Heritage Center, various peaks along the route, etc. There would be a sign that would display a bold graphic representation of the landmark, and its name below. The elevation may also be given.

The outdoor displays would be designed so as to be double or triple panel signs made of weather resistant materials, such as laminated fiber glass, or porcelain enamel on metal, again as a multi-color medium. It is suggested that one panel be devoted to a "Historical Sketch" of the cooperating city, such as Cortez, Ridgway, and Durango. An example is shown as *Exhibit "J"* - Introduction Site - Sign Concept Sketch.

The highest average daily traffic count on the entire Skyway occurs at the Highway 550 and 160 intersection in Durango. The average daily traffic (ADT) count for 1988 was 13,200 per day. The potential to introduce travelers to the Skyway as well as Durango is self evident. There is an opportunity in cooperation with the Division of Highways, who owns the land, and the City of Durango, who is interested in making a "Gateway Park" entry statement in this key area, to construct a facility that accomplishes both objectives. The conceptual plan is shown as *Exhibit "K"* (Durango/Skyway Introduction Site Concept). The project has the commitment and endorsement of all three agencies with $100,000 funding available from the City, and $40,000 from the Division of Highways, and the proposal that the Forest Service match the amount of the partners. There will be, no doubt, other potential partners in this project as development progresses. Cost estimation is shown below.

CONCEPTUAL MASTER PLAN





DURANGO / SAN JUAN SKYWAY
INTRODUCTION SITE CONCEPT

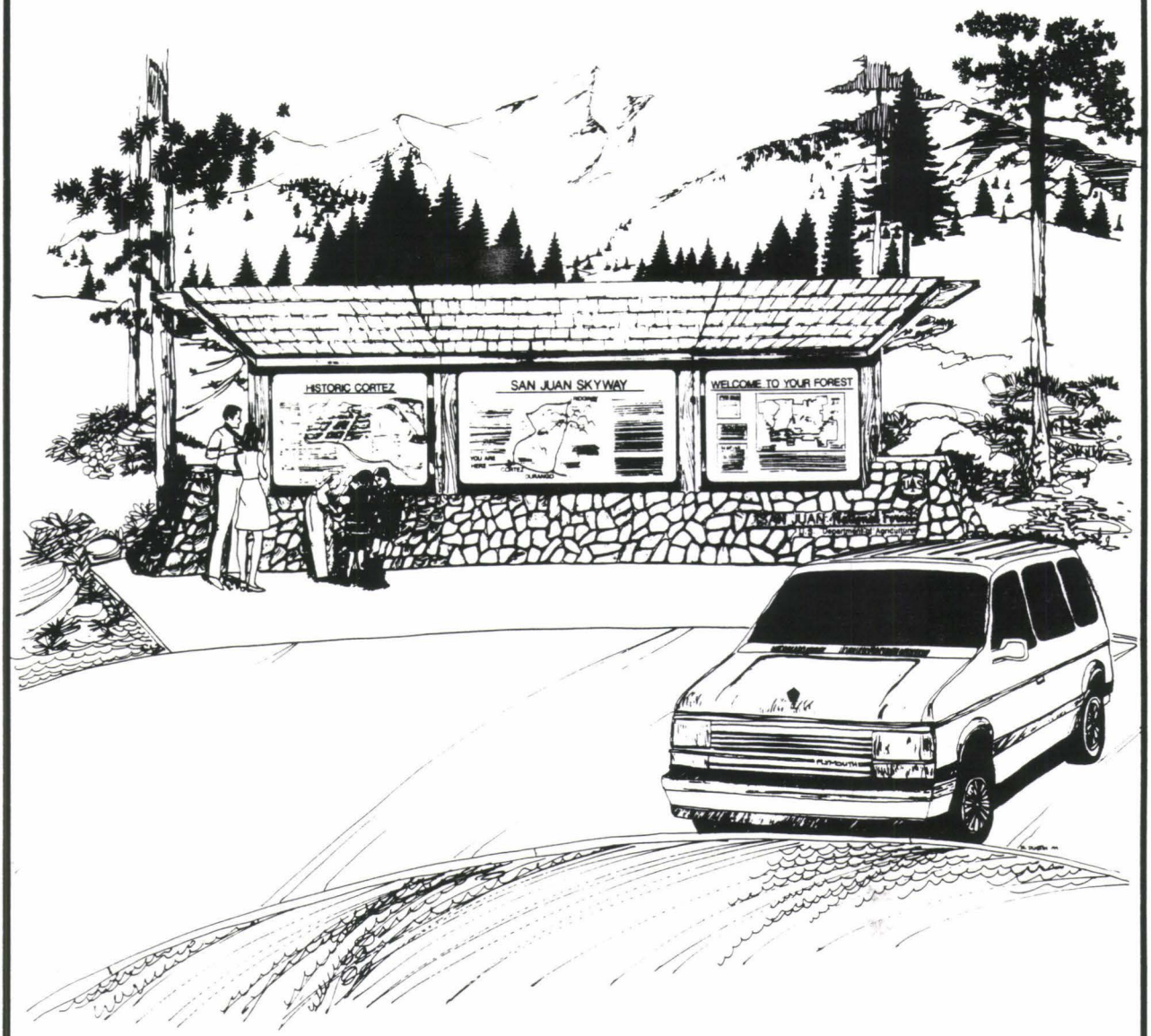
REVISIONS
NO. DATE

DESIGNED R. DUSTIN DATE 12-86
DRAWN R. DUSTIN 12-86
CHECKED
RECOMMENDED
F.S. LANDSCAPE ARCHITECT
APPROVED
DISTRICT RANGER
FOREST ENGINEER
FOREST SUPERVISOR

DESIGN TEAM

EXHIBIT K

INTRODUCTION SITE
— SIGN —



CONCEPT SKETCH

SAN JUAN SKYWAY

NOVEMBER 1989

EXHIBIT J

MISCELLANEOUS INTRODUCTION DISPLAYS AND SIGNS:

COST ESTIMATION: Indoor Displays 2 - 4 x 8' Panels Of Silk Screened Formica

9 @ $3500 Each	$ 31,500
Fabric Portable 1 @ $2000 Each	$ 2,000
Miscellaneous Signs 20 @ $300 Each	$ 6,000
SUBTOTAL	**$ 39,500**

WELCOME TO DURANGO/SAN JUAN SKYWAY INTRODUCTION SITE

(*Exhibit "K"*)

Road And Parking Construction And Paving	$ 70,000
Curb And Gutter	$ 25,000
Corten Guardrail	$ 20,000
Feature Skyway/Welcome Sign	$ 10,000
Topsoil	$ 15,000
Seed and Fertilizer	$ 5,000
Lighting	$ 50,000
Plaza Complex Includes Skyway Exhibit, Concrete, etc.	$ 50,000
Park Complex Includes Paths, Sprinklers, Tables $	35,000
Plant Materials	$ 40,000
Durango Gateway Identity Sign	$ 30,000
TOTAL	**$350,000**

WELCOME TO CORTEZ/SKYWAY INTRODUCTION KIOSK

Installation of introduction/informational kiosk outside the Welcome Center

Kiosk and paving	$ 6,000

WELCOME TO RIDGWAY/SKYWAY INTRODUCTION SITE

The design concept in consideration is similar to the above in the intent of the signing. The concept design is being developed at this writing. The basic costs would be estimated as follows:

Road And Parking	$ 2,000
Curb and Gutter	$ 8,000
Skyway/Welcome Sign	$ 12,000
Landscaping Including Plants, Seed & Fertilizer, etc.	$ 10,000
TOTAL	**$ 32,000**

INTRODUCTION FACILITIES

GRAND TOTAL	**$427,500**

2. **NARROW GAUGE RR OVERPASS** - POINT OF INTEREST.....(CDOH, DURANGO-SILVERTON RR COMPANY,PVT.) Med.
   mp 36.6 - Hwy. 550

INTERPRETIVE SUBJECT(S) A historic sketch of the Narrow Gauge Railroad from the 1880's to present day, pointing out that it is the "granddaddy" of the narrow gauge railways of the world, being the longest continuous running in history, and one of the few still in operation; i.e., the San Juan Mountains were remote and almost untouched until late in the 1800's. The towering peaks, many raising to over 14,000 feet, thrusting upwards an impenetrable barrier and undeniable challenge to would be-settlers, precluding any serious development until the coming of the railroad in the 1880's.

CONCEPT: (ATYPICAL EXPANDED PLAN) This site would have an ATYPICAL, with viewing decks of the "EXPANDED PLAN" on each side of the highway. An asphalt surface trail from the parking areas on either side of the highway to the viewing decks will feature an interpretive sign. An optional raised arch walkway would connect each side of the site just slightly to the west of the existing bridge RR overpass. The purpose of the raised walkway would be safety.

COST ESTIMATION:

800' of 5' Wide Asphalt Surface Trail @ $8 Per Lin. Ft.	$ 32,000
One 30 X 40' Redwood Decks With Two 8' Benches Each	$ 19,600
Two Interpretive Signs @ $1,200 Each	$ 2,400
(2nd Phase) Raised Natural Rusting Arch Walkway W/Steps (Optional)	$ 60,000
TOTAL	**$ 54,000**

3. **SHALONA LAKE** OVERLOOK.....(FS) Med. (*Exhibit "B"*)
mp 38.1

INTERPRETIVE SUBJECT: Historical sketch of the early settlement of the area, "Missionary Ridge" was named after the 1863 Civil War Battle of Chattanooga by early Union settlers. Point out that this area had served as the early "Gateway to the San Juans". The bridge, some four miles to the south was named after Charles Baker, an early pioneer who platted Baker's Park in 1860, later to become known as Silverton. The "Ridge" was looked upon by the early day settlers for the supportive resources for sheep, cattle, and timber. These historical uses are still present and benefit forest users.

CONCEPT: (STANDARD PLAN) The site would feature one interpretive sign. The inclusion of a Forest entry sign should also be done at this area. Parking would be indicated by striping on asphalt.

COST ESTIMATION:

STANDARD PLAN	$ 43,000
Acceleration/Deceleration Lanes	$ 65,000
TOTAL	**$108,000**

4. **HERMOSA CLIFFS** POINT OF INTEREST.....(CDOH, DOW) Med.(*Exhibit "G"*)
mp 42.3

INTERPRETIVE SUBJECT(S) Major story focus of the site could be the rare and endangered Peregrine Falcon, its habitat, dramatic behavior and reintroduction to the area in 1981. A mention or possibly a lead-in statement of the geological formation of the cliffs. A wealth of wildlife (i.e., waterfowl, beaver, raptors, reptiles, wild game, etc.), can be observed and would be good candidates for a joint Forest Service/Division of Wildlife project for "Eyes on (or watchable) Wildlife" interpretation.

CONCEPT: (ATYPICAL EXPANDED W/Nature Trail) The site will facilitate a large development with little modification. This would be a turnout divided from the highway by an island,

and facilitate the EXPANDED PLAN. The highway will probably need a right turn lane for north bound traffic. It would have a viewing platform with two interpretive signs (one of the cliffs, and one for the pond), and a short access trail to the pond which will feature detailed interpretation on specific phenomenon or wildlife species. Possibly two or three small signs and two benches will be provided for observation.

COST ESTIMATION:

EXPANDED PLAN	$ 56,000
600' X 5' Physically Challenged Trail	$ 9,000
Two Interpretive Signs	$ 2,400
Concrete Viewing Pad	$ 5,000
400 Foot Handrail	$ 10,600
Acceleration/Deceleration Lanes	$ 65,000
TOTAL	**$148,000**

5. **WEMINUCHE WILDERNESS** OVERLOOK.....(PVT. WILDERN. SOCIETY, SIERRA CLUB) Low
mp 45.4

INTERPRETIVE SUBJECT: Message bringing out the Weminuche Wilderness as the oldest classified wilderness in the state and also the largest at 459,804 acres. Sketch on wilderness establishment and its management, what it means to the public, and mention of wilderness area in the San Juans. Point out South San Juan's physical and geologic phenomenon, including elevations, the newest, steepest, and some of the most complex of the world, the Needles (which you are looking into) the most precipitous in the nation. Mining served as the opening of the area to settlement, with stories and legends in later years about lost gold and silver mines, many as a result of mining during the 17th century by the Spanish who did not keep records of their operation lest they be taxed by the king of Spain.

CONCEPT: (STANDARD PLAN) An overlook on the east side of the road the same relative size as Shalona Lake site described above. One STANDARD PLAN would be provided. The site is very narrow and may need parallel parking. Traffic through the site should be one way. There will be a need to construct retaining walls on the eastern edge of the site with a likelihood of private land easement acquisition.

COST ESTIMATION:

STANDARD PLAN	$ 44,400
Retaining Wall	$ 22,450
TOTAL	**$ 66,850**

6. **POTATO HILL/PURGATORY FLATS** OVERLOOK.....(FS) Med.
mp 52.1

INTERPRETIVE SUBJECT(S): The prominent mountain is so named for its resemblance to a potato. Possible interpretation of the indication of the skyline mountains, possible discussion of ancient geological glaciation of the broad valley before the viewer. The Southern San Juans was the southern part of the Rocky Mountain fur trade in the 1820-30's, and some of the famous "Mountain Men" were present in the valley you are viewing.

CONCEPT: (STANDARD PLAN) An interpretive overlook which would view a 300 degree panorama. The site is restrictive in its potential size and may have to be constructed by flattening a small knoll to provide parking and a viewing deck. Two to three interpretive signs would be provided.

COST ESTIMATION:

Retaining Walls	$ 33,450
STANDARD PLAN	$ 47,800
TOTAL	**$ 81,250**

7. **PURGATORY / LA PLATA MTS.** OVERLOOK.....(FS, PURG.SKI RESORT) (*Exhibit "C"*)
Low
mp 56

INTERPRETIVE SUBJECT(S) Depiction of skyline mountains and elevations. A number of story possibilities are possible here, but only one should be emphasized with brief mention of one other subject. These are: the story of the "Legend of Purgatory," A short discussion of historical skiing in the area, the Coal Bank area being one of the earliest used for recreational skiing. Mention of the La Platas, and their mention in the journal of Escalante in his expedition of 1776. Mining again was the activity that opened the La Plata range to exploration and a period of habitation in the mining camps of La Plata City, and Parrot City, once a county seat.

CONCEPT: (STANDARD PLAN) An interpretive overlook on the west side of the road, would necessitate the removal and management of certain trees in the foreground to afford the maximum view. One interpretive sign would be provided. Speed limit is 35 mph in this area, and the use of the site will probably be low to moderate. A two-way road is recommended for the access and egress through the site.

COST ESTIMATION:

STANDARD PLAN	$ 48,100
Retaining Wall	$ 33,350
TOTAL	**$ 81,450**

8. **COAL BANK PASS** REST AREA.....(FS) High
mp 56.7

INTERPRETIVE SUBJECT(S) Indication of the skyline mountains and elevations. Two possible subjects here: (1) Geology of the area.... a clear view of dramatic folding of the earth's crust. Discuss what caused it to look this way, (2) Historical travel in the San Juans.....a good perspective of the amazing ruggedness of the San Juans, the major obstacle in early settlement of the area. Many early-day explorers noted them as impenetrable. In 1848, John C. Fremont got lost in the San Juans and after nearly dying trying to cross the range and losing 13 men, declared them "the highest, most rugged, most impracticable and inaccessible in the Rocky Mountains".

CONCEPT: (ATYPICAL EXPANDED) Designed as a "REST STOP", providing a fully accessible rest room, parking for 12-14 cars and four to six RV's. Other improvements would be a short physically challenged interpretive trail to a viewing deck, and a longer trail to another viewing deck over the valley. There will have to be some tree removal on the northern part of the site to facilitate better views from the overlook. Also, some trees will have to be removed to allow for better site distance for access and egress traffic.

COST ESTIMATION:

EXPANDED PLAN	$ 56,000
Two-Unit Fully Accessible Toilet	$ 24,000
300' X 5' Wide Surfaced Trail	$ 13,800
Four Interpretive And One Trail Orientation Sign	$ 6,000
Four Benches	$ 1,600
Highway Approach Signs	$ 600
TOTAL	**$102,000**

9. **TWILIGHT PEAK** OVERLOOK.....(FS, COLO. MTN. CLUB) Med.
mp 57.4

INTERPRETATION SUBJECT(S): Spectacular view into the rugged skyline and story of the 12,000 square miles of the San Juan Mountain range, which is one of the highest in the world with a mean elevation of 10,000 feet. Depiction of the skyline, naming the predominant peaks and their elevations, waterfalls, river drainage, etc.

CONCEPT: (STANDARD PLAN) An interpretive overlook, with the intent of displaying a major scenic panorama of Twilight Peak and the backdrop of the Weminuche Wilderness. The parking may have to be lineal because of the narrow site. The site will also require retaining wall work, which though somewhat expensive is feasible because of the narrow benches existing below the present road. Three signs would be provided on the STANDARD PLAN to take advantage of the scenic panoroma.

COST ESTIMATION:

STANDARD PLAN	$ 48,500
Retaining Wall	$ 45,450
TOTAL	**$ 93,950**

10. LIME CREEK BURN POINT OF INTEREST.....(FS, GARDEN CLUB) Low mp 59.1

INTERPRETIVE SUBJECT(S): Story of the fire of 1879, different stories of how the fire started, how many acres were burned. Note that the scars of the fire still remain today, over 100 years after the fire. Describe the reforestation efforts that were started by the Colorado Garden Clubs in 1924, and note the textural differences of the original remaining old growth of the "man planted" forest on the immediate slopes before the observer. The site is presently an interpretive site, as is the small Deer Creek Rest Area close by. The intent of this effort would expand the above sketchy stories, and present with the continuity of the Skyway interpretive theme. From this site, looking north under the existing highway, one can see remnants of the old Durango-Silverton Stage line which was established and operated for a short period prior to the railroad, by Horace Tabor, the Denver mining baron and husband of the famous Molly Brown.

CONCEPT: (EXPANDED PLAN with SHORT TRAIL) A turnout interpretive site on the east side of the highway. The intent here would be to refine the site and grade to facilitate better vehicle access and egress, improve an existing concrete path with steps, and provide a small picnic pad and table on the location of a long removed toilet structure. The effort would require hauling and compaction of material, grading for the parking area and viewing area. A right hand deceleration lane is desirable but would be difficult to construct. The site would have one interpretive sign.

COST ESTIMATION:

Deceleration Highway Lane	$ 46,700
EXPANDED PLAN	$ 56,000
TOTAL	**$102,700**

11. MOLAS PASS OVERLOOK.....(FS, COLO. TRAIL FOUNDATION) High
mp 64

INTERPRETIVE SUBJECT: This pass is perhaps the most dramatic and impressive view of the spectacular mountain landscape, characteristic of the San Juan Mountains on the entire Skyway. The site would be a natural to discuss the geologic origins of the San Juan Range, and their mineralization which lead to the early mining activity of the region. Molas Lake, one mile to the north, was a favorite picnicking and fishing attraction of the miners of the 19th century. The 1879 Lime Creek Burn is again evident from the predominant knoll on the west side of the highway in an area used historically for sheep grazing. Also, the visibility of the Colorado Trail would be a unique feature that is only evident on this site on the Skyway. A short overview and orientation on the trail and its development.

CONCEPT: (ATYPICAL EXPANDED) The site is divided by the highway, thus giving two different significant viewing opportunities. The major use site is on the east of the highway and could provide a turnout with parking, a short trail to a small knoll with a viewing deck, and two interpretive signs. The road accessing the parking area would be two-way, coming into the highway at a right angle. This vista allows the observer to scan from the south view of the West Needles Mountains on the near view to the northwest and the impressive coloration of Grand Turk and Sultan Mountain. The other would be the knoll directly on the west side of the highway along the pass. An interpretive sign could feature the Colorado Trail and encourage a short hike along it to Little Molas Lake trailhead a quarter of a mile to the west. A small simple viewing area might be developed on top of the knoll. The conceptual plan would need one right hand deceleration lane for the parking area. The Colorado Trail, near here, could be rerouted to take advantage of the interpretation at this point as well.

COST ESTIMATION:

EXPANDED PLAN	$ 69,000
Trail to Viewing Decks	$ 31,500
Acceleration/Deceleration Lanes	$ 175,000
Benches	$ 4,000
Interpretive Signs	$ 9,600
TOTAL	**$291,600**

12. KENDALL MOUNTAIN OVERLOOK.....(BLM) Low
mp 66.3

INTERPRETIVE SUBJECT: With a more intimate view of Kendall Mountain comes the opportunity to focus on the unique historical mining in the Silverton area. The road to Deer Park Basin and Titusville can be readily seen. Its name came from Titusville, Pennsylvania where Colonial Edward Drake struck the first oil well in the U.S., and ironically enough some oil money was used in the development of this Titusville. This small operation was but one area of the San Juan region that had a "rush" over a thirty year period which kept it in the national headlines over a longer period of time than other portions of the region. The roads of the region, including the one to Titusville, are used today as popular 4WD recreation roads. The

cabin and tailings visible in the foreground are also evidence of the mining history of the area. A major portion of the lands one can see from this vantage point are public lands managed for multiple use by the United States Bureau of Land Management.

CONCEPT: (EXPANDED PLAN) The site is characterized by a long bench between the highway and a remnant of the old road. This would lend itself to a road into a parking area and vista area that would be divided from the highway by the bench. A right-hand deceleration lane will be needed for north bound traffic. Two interpretive signs would be appropriate.

COST ESTIMATION:

Expanded Site	$ 65,600
Retaining Wall	$ 15,000
Deceleration Lane	$ 65,000
TOTAL	**$145,600**

13. **SILVERTON** OVERLOOK.....(PVT) Med.
mp 68.1

INTERPRETIVE SUBJECT: The obvious story here is a historical sketch of Silverton and the basin. Known originally as Baker's Park after Charles Baker, a civil war veteran and earlier explorer of the area, who led a small group of prospectors into the basin in 1860. The town that soon grew up as a result of a number of good "strikes" during the 1870's, had its name coined by some miners, as the city of "silver by the ton". It has endured many hardships including isolations by snowslides, silver panics of 1893 and 1907, the silver crashes, annual mean temperature of 35 degrees and a growing season of 12 days a year. It boasted its endurance in some of these challenging years as "The Mining Camp That Never Quits".

CONCEPT: The site would be a turnout on the northeast side of the highway, with parking and a STANDARD PLAN viewing deck. The slow speed limit at 25 mph, would probably preclude need for acceleration and deceleration lanes. It would be necessary to selectively cut some trees to afford an optimum view into the valley.

COST ESTIMATION:

STANDARD PLAN	$ 50,900
Retaining Wall	$ 24,445
TOTAL	**$ 75,345**

14. CHATTANOOGA POINT OF INTEREST.....(FS, DOW) Low
mp 78.1

INTERPRETIVE SUBJECT: Was in the economic orbit of Silverton, served as a forwarding distribution point from Silverton for the mines of the Red Mountain district. It came into existence in 1883, boasted of its own post office, 75 buildings, including a hotel, restaurants, the necessary saloons, and a population of 300, predominantly mule skinners and burro punchers. With the coming of Mears' toll road in 1884, and the railroad in 1888, the town had little reason to exist. A fire wiped out most of the town in 1892 and the many snowslides of the basin destroyed the rest. One may still notice remnants of the old Silver Ledge Mine structures in the valley and in the valley running parallel to the highway to Red Mountain. This mine led to the first recovery of zinc for profit. The existence of many beaver ponds in the valley provide for wildlife viewing.

CONCEPT: (STANDARD PLAN) The site would be a turnout interpretive site on the easterly side of the highway with an interpretive sign looking into the old town site. The site will need to be designed to withstand possible snowslides, i.e., the interpretive sign and benches should be removable for winter months.

COST ESTIMATION:

STANDARD PLAN	$ 42,550
Retaining Wall	$ 22,000
TOTAL	**$ 64,550**

15. RED MOUNTAIN PASS REST AREA/POINT OF INTEREST.....(FS) High
mp 80.0

INTERPRETIVE SUBJECT: Highest elevation point along the Skyway at 11,018 feet. Historical perspective would be provided and also a caution to respect the privately owned old mining structures at a distance because of the dangers of the many vertical shafts. The pass, which was also called Summit or Sheridan Junction, served as switching location for railroad cars and was the site of a wye which served the booming camps of Red Mountain and beyond for the transportation of ore to Silverton.

CONCEPT: (ATYPICAL PLAN) The site would be developed as a rest stop including: a parking area, interpretive signing, a physically challenged (barrier free) toilet, unit pad for picnicking with tables, interpretive trail, and approximately two associated interpretive signs. It will need a deceleration right turn lane for south bound traffic. The parking area access road should be two-way.

COST ESTIMATION:

EXPANDED PLAN	$ 56,000
Double Unit Physically Challenged Toilet	$ 24,000
Deceleration Lane Trail	$ 79,000
TOTAL	**$159,000**

16. IRONTON/CORKSCREW GULCH POINT OF INTEREST.....(FS, IDARADO MINE)
Med. (*Exhibit "F"*)
mp 82.4

INTERPRETIVE SUBJECT: Perhaps the most saturated point along the Skyway for visible historical mining structures and remnants. A landscape illustration of the area, (possibly historic photograph) would depict the townsites, mines, (including the still visible shaft house of the Yankee Girl Mine), railroad locations, and other landmarks. Control of the area was hotly contested by Silverton and Ouray. Otto Mears' toll road served the area by giving access to Ouray until 1888 when Mears brought the railroad from Silverton. The Red Mountain mines of the area gave rise to an impressive early urbanization with the settlements of Guston, Congress, Ironton, Red Mountain, all within a stone's throw of each other. The miners were predominantly young single American men, through an influx of a rising percentage of Colorado-born children. The largest foreign element emigrated from the British Isles. During the prime era in the late 19th century, over one billion dollars worth of minerals were taken from the area. The operation of the more modern day Idarado mine, which was a supplier of base metals to the World War II war effort, can also be seen from this vantage point.

CONCEPT: (EXPANDED PLAN) An interpretive turnout on the easterly side of the highway. The site is characterized by a small continuous knoll, but with a good potential panorama of the area. The knoll would be flattened to afford ample parking room and location of a viewing deck. The access into the site will require a right-hand deceleration lane for north bound traffic. The improvement would include two interpretive signs.

COST ESTIMATION:

EXPANDED PLAN	$ 58,500
Retaining Wall	$ 29,000
Deceleration Lane	$ 65,000
TOTAL	**$152,500**

17. UPPER UNCOMPAHGRE GORGE CAMERA POINT.....(CDOH, PVT) Low
mp 87

INTERPRETIVE SUBJECT and CONCEPT: This site located at the extreme north end of Ironton Park on the west side of the highway would serve as a simple turnout camera point for the view of the spectacular range to the south of the park of Red and Brown Mountains. It would also serve as an introduction to the unique Uncompahgre Gorge and how it was formed geologically.

COST ESTIMATION:

CAMERA POINT PLAN	$ 8,000

18. RIVERSIDE SLIDE SNOWSHED POINT OF INTEREST.....(FS) Med.
mp 87.6

INTERPRETIVE SUBJECT: Avalanche! This part of the Rocky Mountains have more snowslides per mile than any other highway in America. There have been many lives lost (over 200) by avalanches over the years including travelers, and those who maintain this stretch of highway. The dynamics and history of the area avalanches will be depicted with illustrations of how an avalanche develops. The East Riverside Slide can be observed usually bridging across Red Mountain Creek year-round.

CONCEPT: (ATYPICAL PLAN) The site will be a turnout interpretive site on the west side of the highway just north of the recently constructed snowshed. A short trail will provide access to a viewing deck on the edge of the road and will feature one interpretive sign. Barriers will need to be provided for snowplowing purposes. The signs on this site will be removed during the winter months.

COST ESTIMATION:

ATYPICAL PLAN	$ 48,000

19. UNCOMPAHGRE RIVER WATERFALL & ACCESS TO BLM ALPINE LOOP SCENIC LOOP DRIVE POINT OF INTEREST.....(FS, BLM) Med.
mp 89.3

INTERPRETIVE SUBJECT: A unique man-made tunnel on the west side of the highway provides a beautiful view of a cascading waterfall that would serve as a story to demonstrate the difficulty of building a road through one of the most rugged sections of the Rocky Mountains. The intersection also serves as a popular jump-off for the BLM Alpine Scenic Loop four-wheel drive. A sign would be placed in a visible location to give information and orientation.

CONCEPT: (ATYPICAL PLAN) This site is two sections, one being the parking, trail and an interpretive sign featuring the waterfall on the west side of the highway, the other would be a pull-through area on the east side of the highway with a multi-panel sign showing a map of the area and orientation and noting where you are on the map.

COST ESTIMATION:

350 Linear Feet Of Trail	$ 3,800
20 x 20 Concrete Viewing Deck	$ 15,000
STANDARD PLAN	$ 36,100
Retaining Wall	$ 10,500
TOTAL	**$ 65,400**

20. BEAR CREEK FALLS OVERLOOK.....(FS) High
mp 90.4

INTERPRETIVE SUBJECT: Historical sketch of the Otto Mears' toll road pay station which existed at the location of existing highway bridge. This site, as well as the inclusion of the existing Mears monument on the north side of the highway could be included in the development. A brief sketch of the falls would also be appropriate.

CONCEPT: (ATYPICAL EXPANDED PLAN) A parking area exists at the site that would be expanded for car and RV parking. A viewing deck would be provided that would view the falls and the bridge, with an interpretive sign discussing both. A safe walkway should be constructed between the two parking areas. The chain-link fence around the parking area should be replaced with a more aesthetic fence.

COST ESTIMATION:

Extended Pad W/Cantilever Deck	$ 68,450
Railing	$ 21,000
TOTAL	**$ 89,450**

21. BEAR CREEK NRT TRAILHEAD.....(FS) Low
mp 90.6

INTERPRETIVE/INFORMATIONAL SUBJECT: The historical story of the trail and how it was used by early miners to access their workings in the extraordinary rugged cliffs above. Touch on the recent reconstruction of the trail and its designation as a National Recreation Trail. A map would be displayed of the trail, noting distances, difficulty, and a "You Are Here" arrow at the trail head location. There may also be a brief mention of unique features that one can see while walking the trail.

CONCEPT: The site would be basically a parking area for cars and RV's with an interpretive/ informational sign at the beginning of the trail.

COST ESTIMATION:

Paving Of Parking Area	$ 12,000
Interpretive/Information & Approach Signs	$ 4,000
TOTAL	**$ 16,000**

22. OURAY OVERLOOK.....(BLM, OURAY) Med.
mp 92.1

INTERPRETIVE SUBJECT: Historical sketch of Ouray, noting perhaps a brief of Crofutt's 1882 description in regard to its location in "a grand amphitheater of nature". Early on, it was a mining town that welcomed tourists, and gained further notoriety from D&RG's promotion of the Circle Tour which started in the eastern slope towns of Pueblo and Denver. Ouray was

connected to Silverton by the Concord Stage Coach. The town was incorporated in 1876, one year after the first prospectors stumbled into the valley from Howardsville. The mines in the area were among the richest producers in the world, with those such as Camp Bird Mine recording thirteen million dollars in gold between 1896 and 1910. Other attractions of the valley are the hot springs, Cascade and Box Canyon Falls.

CONCEPT: (EXPANDED PLAN with SHORT TRAIL TO SECOND DECK) The site has an existing overlook; however, signing is amateur and trees are hampering the view to the valley. Selected trees should be removed and the signing consolidated into one area. A short trail down the ridge spine to a viewing deck would feature the view into town. Parking should be formalized and also the installation of a designed or natural rusting guardrail to fit and complement the site would be appropriate.

COST ESTIMATION:

EXPANDED PLAN	$ 33,100
Retaining Wall	$ 10,600
Two Interpretive Signs	$ 2,400
Parking Delineation	$ 1,200
Concrete Viewing Deck	$ 24,000
Highway Approach Sign	$ 600
TOTAL	**$ 71,900**

23. OURAY BIG GAME WINTER RANGE POINT OF INTEREST.....(DOW) Low
mp 94.6

INTERPRETIVE SUBJECT: Historically, the area was owned by the Ute Indian Tribe; Chief Ouray lived for a number of years in the area. During that era, as today, the area is used by game as winter range. During the late fall, winter, and early spring, elk and deer are prevalent. The Indians used it as a hunting area, and today it is mainly agricultural. An interpretive message will be developed in coordination with the Colorado Division of Wildlife on the "Watchable Wildlife" program.

CONCEPT: (STANDARD PLAN) A turnout interpretive site on the east side of the highway featuring one interpretive sign.

COST ESTIMATION:

STANDARD PLAN	$ 39,100

24. CIMARRON RIDGE OVERLOOK.....(BLM) Low
mp 21.9 - Hwy. 62

INTERPRETIVE SUBJECT: Illustration of the Skyline and showing of major peaks and landmarks and their elevations. Historical sketch of Ridgway, the northern terminus of the Rio Grande Southern Railroad, perhaps noting the historic freighting operation of Dave Wood.

CONCEPT: (STANDARD PLAN) An overlook interpretation site on the north side of the highway. An optional short trail could be developed to the prominent knoll just to the north of the site to view a 360 degree panorama in a later stage of development.

COST ESTIMATION:

STANDARD PLAN	$ 42,300
400 x 5 Lineal Feet or Trail	$ 12,500
Viewing Deck	$ 14,000
Interpretive Sign	$ 2,400
TOTAL	**$ 71,200**

25. DALLAS DIVIDE OVERLOOK.....(BLM, Bar RL Ranch) PVT) High mp 13.8

INTERPRETIVE SUBJECT: A skyline illustration noting peaks and elevations, of one of the most spectacular scenic panoramas on the Skyway. The Mt. Sneffels range is a most impressive view from this point, particularly in the fall. The historic divide came into fame during the D&RG railroad years. It should also be brought out that the old stagecoach station that served the route prior to the arrival of the railroad is still visible today near the pass, though partially obscured in summer by aspen trees.

CONCEPT: (ATYPICAL EXPANDED PLAN) An impressive site exists on the old barrow site of the highway. The site has ample room for parking of standard vehicles as well as RV's. The site would need a full set of acceleration/deceleration lanes on the highway. An EXPANDED PLAN would utilize the site and would feature the dramatic view to the south and southeast of Mt. Sneffels range with one interpretive sign. A trail would go from the parking area to the top of a predominant knoll where a viewing deck would give a 300 degree scenic panorama portrayed with four interpretive signs.

COST ESTIMATION:

EXPANDED PLAN	$ 81,000
300 x 5 Lineal Feet Of Trail	$ 12,500
A/D Lanes	$ 250,000
Concrete Viewing Deck	$ 6,000
Four Interpretive Signs	$ 4,800
Two Benches	$ 800
Highway Approach Signs	$ 600
TOTAL	**$355,700**

26. NARROW GAUGE RR TRESTLE POINT OF INTEREST.....(BLM) Low
mp 8.3

INTERPRETIVE SUBJECT: Perhaps the best view of the narrow gauge railroad trestle on the Skyway. The coming of Rio Grande Southern Railroad to the area in June, 1890 was a unique event for this remote locale. Twenty-four construction camps were established to move tons of materials needed to build a railroad. This trestle remains as evidence of an enormous effort a hundred years ago.

CONCEPT: (CAMERA POINT PLAN) The land on which the trestle exists is marked "private-no trespassing". If negotiations can provide for use of the site, a formalized parking area and viewing deck could be done. The site could feature an interpretive sign noting the historical feature with a warning to the visitor not to trespass on the private land.

COST ESTIMATION:

CAMERA POINT PLAN	$ 8,000

27. LEOPARD CREEK TOWNSITE POINT OF INTEREST.....(BLM) Low
mp 3.9

INTERPRETIVE SUBJECT: A historical sketch of the old town site. (more research is needed here....)

CONCEPT: (CAMERA POINT PLAN) The function of the site would be to allow cars to pull off the highway into a lane where they would stop shortly, read a sign or take a picture. An interpretive sign would be in the format of a modular panel sign system.

COST ESTIMATION:

CAMERA POINT PLAN	$ 8,000

28. PLACERVILLE SKYWAY INTRODUCTION SITE.....(PVT) Low
mp 84.4 - Hwy.145

INFORMATION and CONCEPT: (STANDARD PLAN PARKING SCHEME) This site will serve as a turnout introduction site to orient travelers coming from the west via Highway 145. Traffic would be one way. The proposed site would view the Placerville intersection where the actual Skyway begins. The sign would be a two or three panel sign depicting a Skyway map with this site as a northwestern entry site, showing an arrow "You are Here" as in other introduction sites. Information could be related about the many recreation opportunities and side attractions along the Skyway. The parking scheme is from a STANDARD PLAN.

COST ESTIMATION:

STANDARD PLAN	$ 44,300
Retaining Wall	$ 9,450
TOTAL	**$ 53,750**

29. VANADIUM TOWNSITE POINT OF INTEREST.....(BLM) Med.
mp 77.3

INTERPRETIVE SUBJECT: Pierre and Marie Curie isolated radium from uranium ore in the 1890's. They knew of and used the rich vanadate ore of southwestern Colorado. To supply the research in France, a reduction plant was built on this site in 1910. Originally known as "Newmire" the town was later named "Vanadium". The product was used to strengthen steel, but a by-product was found useful in illuminating watch dials until its full development in the war years of the 1940's for the "Manhattan Project". Ore from this region was used in the development of the atomic bombs deployed during World War II against the Japanese in Hiroshima and Nagasaki.

CONCEPT: (STANDARD PLAN) The old town site is restricted with a fence around it and no-trespass signs. There is, however, a site on the right side of the highway, used presently by the Division of Highways as a waste site that would be large enough for an interpretive site. The site would feature one interpretive sign. A viewing deck probably would not be warranted at this location because views are minimal.

COST ESTIMATION:

ATYPICAL PLAN	$ 26,900

30. HIGHWAY 145 TELLURIDE INTRODUCTION/ FOREST ENTRY SITE..(TELLURIDE SKI AREA)....(FS) Med.
mp 72, Hwy. 145

INTERPRETIVE SUBJECT: This area views the old narrow gauge railroad bed in the ravine below, as well as a good vista of the upper San Miguel Valley/Telluride City, including a view of the ski area and a portion of the town of Telluride. The message could briefly point out these elements. If the Placerville introduction site is not constructed initially, other important information that could be portrayed is the "Welcome to the Skyway" and "You Are Here" for those who would be entering the Skyway for the first time via Highway 145 from Norwood to the west.

CONCEPT: (STANDARD SITE) A turnout with parking and a STANDARD PLAN viewing deck oriented to take advantage of the above attractions. A Forest entry sign will also be incorporated into the site and design in such a way that it can identify the Forest as well as complement the interpretive intent. Two interpretive and one forest entry sign would be provided.

COST ESTIMATION:

STANDARD PLAN	$ 44,100
Retaining Wall	$ 19,450
TOTAL	**$ 63,550**

31. GOLD GULCH CAMERA POINT .....(FS) Low
mp 65.9

INTERPRETIVE SUBJECT: A landscape illustration would depict the skyline, elevations and landmarks, such as Sunshine Mountain, and the narrow gauge RR location on west side of the valley.

CONCEPT: (CAMERA POINT) The site is a popular overlook presently. The parking could be paved and delineated with two interpretive signs on on the side of the rim.

COST ESTIMATION:

CAMERA POINT PLAN	$ 8,000

32. GRASSY KNOLL OVERLOOK.....(FS, COLO.-UTE) Med.
mp 65.4

INTERPRETIVE SUBJECT: The story of the Ames Power Plant and the first use of AC electricity by L.L. Nunn, a Telluride banker and developer of the Ames site. The electric power was used in the mines of the area starting in 1891. The water penstock and powerlines can still be seen from this location. There would also be a skyline illustration depicting the southerly view including the Cathedral Spires (Ophir Needles) and associated views.

CONCEPT: (ATYPICAL PLAN) The site would be a walk-in interpretive and rest area, with a parking area and a trail leading to a viewing deck on top of the small vista to the west of the highway. The development would require a right-hand deceleration lane for south-bound traffic. The viewing decks would feature three interpretive signs. A two-unit barrier-free toilet would also be provided.

COST ESTIMATION:

Deceleration Lane	$ 65,000
Three Interpretive Signs	$ 3,600
Concrete Viewing Deck	$ 25,200
Two Benches	$ 1,200
300x5 Trail	$ 24,000
Associated On-Site Directional Signs	$ 1,000
Highway Approach Signs	$ 600
Two Unit Physically Challenged Toilet	$ 24,000
Paved Parking	$ 25,400
TOTAL	**$170,000**

33. SOUTH OPHIR CAMERA POINT.....(FS) Low
mp 69.4

CONCEPT: (CAMERA POINT) The site will be identified as a camera photo point for the view into the valley below. There are a number of trees that could be selectively cut to enhance the photo opportunities.

COST ESTIMATION:

CAMERA POINT PLAN	$ 8,000

34. TROUT LAKE OVERLOOK.....(FS) Med.
mp 61.1

INTERPRETIVE SUBJECT: A skyline illustration would indicate peaks, elevation, and other landmarks. This is perhaps the best opportunity on the Skyway of a view overlooking a lake in a high alpine landscape. Historical sketch of the small cirque basin can be tied into the early mountain-man era of fur trapping in the 1820's and 30's in the South San Juan Mountains.

CONCEPT: (STANDARD PLAN) Development for a turnout interpretive site on the east side of the highway overlooking the Trout Lake basin. Material would have to be hauled in, compacted and graded for the parking and viewing deck area as well as construction of retaining walls. This would be possible without much impact to the site as a bench is existing just below and parallel to the highway. The site would require a right-hand deceleration lane for south-bound traffic. The site would feature two interpretive signs.

COST ESTIMATION:

STANDARD PLAN	$ 50,800
Retaining Wall	$ 46,450
Deceleration Lane	$ 65,000
TOTAL	**$162,250**

35. LIZARD HEAD PASS REST SITE/POINT OF INTEREST.....(FS) High
mp 59.6

INTERPRETIVE SUBJECT: The highest pass on the historical, and now removed, Rio Grande Southern Railroad route. The area to the west of the site is Lizard Head Wilderness, designated by the 1980 Colorado Wilderness Act. An overview of wilderness, its reason for being, management intent, etc., would be appropriate. Notation of the Rio Grande Southern Railroad and its historical development and service from 1891 to 1952. The 10,250 foot pass was the site of a wye and snowshed. The railroad was used extensively in the early days to move cattle and then sheep into the summer and winter ranges. A sawmill on the east side of the valley supplied ties to the railroad as well as the mining camps of the area for mining timbers.

CONCEPT: (ATYPICAL EXPANDED PLAN) Development of an interpretive/rest site with parking, a viewing deck, a toilet, interpretive trail and signs, picnic area, and trailhead for the wilderness. These elements currently exist but are in need of better organization and improvement. The site will feature four interpretive/informational signs.

COST ESTIMATION:

EXPANDED PLAN	$ 56,000
Two Unit Toilet (Modification)	$ 24,000
300 x 5 Lin. Ft. Trail	$ 9,600
Five Picnic Tables	$ 3,000
Five Picnic Site Pads	$ 10,000
Four Interpretive Signs	$ 4,800
Highway Approach Signs	$ 600
Connecting Road	$ 82,000
TOTAL	**$190,000**

36. LIZARD HEAD CAMERA POINT.....(FS) Low
mp 57.5

INTERPRETIVE SUBJECT: The landmark of Lizard Head Peak became the trademark for the Rio Grande Southern Railroad. The 13,113 foot peak lies within the Lizard Head Wilderness and is named for its likeness to a lizard.

CONCEPT: (CAMERA POINT PLAN) A popular site for photographers of the landmark. It was used for over 60 years as an excursion stop of RGS RR. The concept would be to identify the site as a camera point and display a short interpretive message noting how it looks like a lizard on the sign.

COST ESTIMATION:

CAMERA POINT PLAN	$ 8,000

37. RICO POINT OF INTEREST.....(RICO) Low
mp 49.1

INTERPRETIVE SUBJECT: The early mining camp was known by a number of names, i.e., Carbon City, Carbonateville, Lead City, and Dolores City; the wealth of the area eventually was reflected in the name that stuck, Rico, which means rich. It had its beginnings after Col. J.C. Haggerty discovered rich silver ore in 1879. The mines around Rico produced great quantities of high grade ore. The town has endured boom to bust to boom many times in its colorful history. After the turn of the century it became known as a company town, with the exclusion of the business district. It still retains much of the appearance of a 19th century mining town. Take time to tour the back streets that remain relatively unchanged from the early days.

CONCEPT: (STANDARD PLAN) The site is north of Rico and would be an interpretive turnout on the east side of the highway with a standard viewing pad and parking configuration and one interpretive sign. The site best facilitates south-bound traffic.

COST ESTIMATION:

STANDARD PLAN	$ 42,250
Retaining Wall	$ 24,450
TOTAL	**$ 66,700**

38. RICO COKE OVENS POINT OF INTEREST.....(FS) Low
mp 45.7

INTERPRETIVE SUBJECT: The coke ovens are noted as some of the only "beehive" coke ovens in western America. Note the unique beehive dome shape of the existing structures. The ovens were used to produce coke out of coal for use in the blast furnaces in the smelting process for the ores of the area.

CONCEPT: (CAMERA POINT PLAN) Three visible crumbling ovens are located just south of Rico. The scale of this opportunity suggests a minor development. A small turnout suited for the camera point plan should be adequate.

COST ESTIMATION:

CAMERA POINT PLAN	$ 8,000

39. SCOTCH CREEK POINT OF INTEREST.....(FS) Low
mp 44.3

INTERPRETATION AND CONCEPT: An interpretive sign exists about the historical Scotch Creek Toll Road. The sign could be improved by use of the same material as the rest of the signs of the Skyway. The sign location would be sufficient in that it introduces a side drive recommended for four wheel drive vehicles. Highway approach signs noting the point of interest would be needed.

COST ESTIMATION:

Interpretive Sign	$ 1,400
Highway Approach Signs	$ 600
TOTAL	**$ 2,000**

40. BEAR CREEK REST SITE/TRAILHEAD.....(FS) Med.
mp 34.2

INTERPRETIVE SUBJECT: The area is a prime example of a western Colorado deep canyon riparian ecosystem in a natural appearing state. The amount of biological diversity, and interrelationship of the ecosystem would have numerous possibilities for discussion. A few of the more relevant examples would be the bird, rodents, and game/non-game mammals and plants living in the area.

CONCEPT: (ATYPICAL PLAN) The site would be a dual use area with one area being devoted for a rest site, complete with parking area, rest rooms, interpretive signs, nature trail, picnic sites with tables, and benches. Another completely separate area would be developed for a trailhead for the Bear Creek drainage. The vegetation is dense enough on this site to afford each site solitude. The trailhead, which will be accomplished through the Regional CIP process, would provide for standard vehicles and horse trailers with an emphasis on the latter. Hitching racks, unloading ramps, stock-cinching rack, and area orientation sign would be provided for the trailhead. The site will require a full set of deceleration and acceleration lanes.

COST ESTIMATION:

Paved Access Road and Parking	$ 19,500
Two Unit Toilet	$ 24,000
Five Interpretive Signs	$ 6,000
1200 x 5 Lin. Ft. Paved Interp. Trail	$ 13,500
Five Picnic Pads	$ 10,000
Five Picnic Tables	$ 3,000
Highway Approach Signs	$ 600
Acceleration/Deceleration Lanes	$250,000
TOTAL	**$326,600**

41. ASPEN VIEW OVERLOOK.....(FS) Low
mp 29.4

INTERPRETIVE SUBJECT: The Dolores River Canyon has an unusually rich component of aspen on both sides of the canyon. During the fall months, this area is alive with the colors of the season and adds extreme beauty for the traveler. The story of "why do leaves change color?", could be discussed as well the botanical phenomenon of the aspen as "individuals in a community" would be enlightening.

CONCEPT: (STANDARD PLAN) An overlook interpretive site on the east side of the highway featuring one interpretive sign.

COST ESTIMATION:

STANDARD PLAN	$ 47,800
Retaining Wall	$ 31,450
TOTAL	**$ 79,250**

42. RED CLIFFS POINT OF INTEREST.....(FS) Low
mp 25.9

INTERPRETIVE SUBJECT: "The early stage of soil". The red sandstone cliffs of the canyon sides are very dramatic in this area. The sandstone was once sand on the bottom of an ancient lake during prehistoric eras, millions of years ago. Sandstone is formed by agglutinated grains of sand, cemented together by siliceous mineral under pressure of the overburden on top of it. The color is a result of minerals. The rock will eventually break down, through eons of future time, into smaller formations, to rocks, to pebbles, to soil, which will eventually support plants and animals. This in turn supports the growth of forest around you.

CONCEPT: (CAMERA POINT PLAN) The site would be a turnout interpretive site, with a sign that could be read from a vehicle. There would be no permanent parking provided as the potential site is very narrow in this area. With a certain amount of grading and widening, the site would be adequate to accommodate vehicles turning into the lane, reading the message and then pulling back onto Highway 145. The site best facilitates north-bound traffic.

COST ESTIMATION:

STANDARD PLAN	$ 46,200
Retaining Wall	$ 24,450
TOTAL	**$ 70,650**

43. MCPHEE RESERVOIR OVERLOOK.....(BOR) Low
mp 9

INTERPRETIVE SUBJECT: McPhee Dam - The story development depicting the planning, construction, and finish of this massive project. The project provided the largest and most

expensive archeology project in history. Benefits that have resulted from water-borne recreation and irrigation for the agriculture of the region. Listing of certain information, such as water surface acre feet, costs, dates of construction, etc. could also be listed.

CONCEPT: (CAMERA POINT PLAN) The ideal site for this facility is south of the Dolores/ McPhee Reservoir bridge on Highway 145. This site has a good view of the eastern portion of the reservoir. An interpretive sign would depict the above message.

COST ESTIMATION:

CAMERA POINT PLAN	$ 8,000
Retaining Wall	$ 5,000
TOTAL	**$ 13,000**

44. CORTEZ/DOLORES HIGHWAY 145 OVERLOOK.....(CDOH, CORTEZ) Med. mp 2.8

INTERPRETIVE SUBJECT: The panorama views 360 degrees of the characteristic southwestern landscape including the views of the La Platas, Wilsons, Mesa Verde formation, Sleeping Ute, and the Abajo Mountains. A skyline illustration would give names and elevations of the predominant peaks and landmarks. The valley before you had more population in the prehistoric past than today. The Anasazi culture thrived here in the sixth and seventh centuries. The area is renowned for the remains of that interesting culture. The area has also been an inspiration for contemporary cowboy authors such as Zane Grey (Riders of the Purple Sage), and Louis L'Amour (Shalako).

CONCEPT: (STANDARD PLAN) The overlook interpretive site would be on the east side of Highway 145. A viewing deck would be slightly elevated to view over the parking area and highway, and would include up to five interpretive signs for the panorama view.

COST ESTIMATION:

STANDARD PLAN	$ 40,650
Retaining Wall	$ 9,450
TOTAL	**$ 50,100**

45. SLEEPING UTE OVERLOOK.....(FS, CDOH) High
mp 46.4 - Hwy 160

INTERPRETIVE SUBJECT: One view is that of Sleeping Ute Mountain which has the configuration of a man laying asleep with his arms folded over his chest. His toe is evident on the south part of the formation. Ute legend says that God became angry with his people and gathered the clouds together and lay down to sleep. One day he will cease to be angry and awaken and lead the Utes in vanquishing their enemies. The mountain remains sacred to the Ute people.

The other major view would be into the La Plata Mountains, so named by 18th century Spanish explorers of southwestern Colorado. The name La Plata means "silver", but historically the mines of the area yielded gold during the height of production between the 1870's and 1930's.

Another subject that would be complementary for this facility is the story of the U.S. Forest Service fire tower and its historical use throughout the western United States in fire control.

CONCEPT: (ATYPICAL PLAN) The site is the current Colorado Division of Highways Cortez Rest Area. An excess fire lookout tower of the San Juan National Forest would be moved to the site erected, and modified for the public viewing of the surrounding area. A viewing walkway would permit the visitors to see the area and interpretive sign together. The tower would be located in an optimum location for viewing the area. A paved walk leading from the parking area to the tower and a number of interpretive signs would be installed.

COST ESTIMATION:

Relocation of Fire Tower	$ 34,000
Asphalt	$ 5,800
Four Interpretive Signs	$ 4,800
Fire Tower Modifications	$ 4,000
200 x 5 Lin.Ft. Paved Walkway	$ 5,400
TOTAL	**$ 54,000**

46. MANCOS VALLEY OVERLOOK.....(MANCOS) Low
mp 54.5

INTERPRETIVE SUBJECT: Historical sketch of the town of Mancos and also the valley. Mancos is the oldest agricultural settlement in southern Colorado. It had its beginnings in prehistory of the Anasazi Indians who inhabited the Montezuma county area for some 1300 years. During the 1700's, Spanish expeditions penetrated the valley with Don Maria de Riveria and his soldiers in 1765 and the Escalante-Dominguez trek in 1776. A U.S. Geological Survey party, of which the famous pioneer photographer, W.H. Jackson, was a member, was led into ruins by Captain John Moss, an early prospector of the area, in 1874. In 1876, ranching interests from Texas had settled in the valley along with a Mormon contingent from Bluff, Utah.

CONCEPT: (STANDARD PLAN) The site would be an overlook interpretive site on the south side of the highway, close to the Mancos Business Loop turnoff. It would feature one interpretive sign.

COST ESTIMATION

STANDARD PLAN	$ 43,000
Retaining Wall	$ 18,450
TOTAL	**$ 61,450**

47. THOMPSON PARK/CAVINESS MOUNTAIN OVERLOOK.....(FS) Med.
mp 62

INTERPRETIVE SUBJECT: From this vantage point, one can view "a working forest". There are multiple uses in place on the biologically diverse slopes of Caviness Mountain before you. Activities, programs, and uses such as cattle range, big game habitat management, utility corridors, transportation, fire control, wood gathering, timber production, hunting, picnicking, camping, nature study, ATV and 4WD travel, hiking, archeological and historical resource uses, watershed management, and fire control are all present here. Many of these benefits of this managed forest have been enjoyed historically by the residents of beautiful Thompson Park in the valley before you.

CONCEPT: (STANDARD PLAN) A turnout interpretive site on the south side of the highway. It would provide one interpretive sign featuring the view of Caviness Mountain. The site will likely require a full set of acceleration and deceleration lanes.

COST ESTIMATION:

STANDARD PLAN	$ 44,600
Retaining Wall	$ 17,450
Acceleration/Deceleration Lanes	$ 250,000
TOTAL	**$312,050**

48. HESPERUS HILL/DURANGO OVERLOOK.....(DURANGO) Low
mp 73.8

INTERPRETIVE SUBJECT: A historical sketch of Durango. With the coming of the Denver and Rio Grande Railroad to southwestern Colorado came also the need to establish a railhead and trade center in a climatically favorable location to support the mining activities of the high elevation mining towns. Through a series of events the site of present day Durango was selected. It literally boomed in its early days, with some trademarks of an early western town, with a few cowboy gunfights and associated lawlessness. The narrow gauge railroad has long been one of the cornerstones of Durango's existence as it is today. It is one of the last remaining operations in the United States. Durango has prospered from the early days to present day to be the major commerce center of southwestern Colorado. One can see Fort Lewis College as well as a portion of Durango from this point.

CONCEPT: (CAMERA POINT PLAN) A turnout camera point site with parking on the north side of the highway near the top of Hesperus Hill featuring the historical overview of Durango as above. The site gives a view into Perins Peak, Durango, and into the high mountain peaks in the background.

COST ESTIMATION:

CAMERA POINT PLAN	$ 8,000
Retaining Wall	$ 5,000
TOTAL	**$ 13,000**
ALL SITES SUBTOTAL	**$4,254,800**

------- COMPLEMENTARY FACILITIES AND SITES------

49. "A-G"

The following projects are identified facilities that would be classified as complementary and could be scheduled and developed through a variety of possibilities including but not limited to partnerships, federal funding, lottery funds, fund-raising, and private and corporate donations. The facilities in part or in whole will meet the overall objectives and reflect the interpretive theme of the Skyway.

A. **DURANGO VISITORS CENTER**.....(FS. DURANGO, CDOH, BOR, BLM, DOW) High

INFORMATION/INTERPRETATION and CONCEPT: The facility would be the key introduction point on the entire Skyway. A likely proposal would be to serve as an inter-agency visitor center with introduction intent for a number of attractions of which the Skyway would be a major feature. This facility would feature a Skyway map indicating "You are Here", a relief model of the region, video programs, brochure, travel guides, etc.

The center is proposed in a key location in a gateway park of Durango at the intersection of Highways 160 and 550 which has the highest average daily traffic count in southwestern Colorado. The facility would be 12,000 to 15,000 square feet and would facilitate reception, exhibits, and a small auditorium. Until the time a visitor center may become feasible, the site will be used as a dual-purpose Welcome to Durango/Skyway Introduction via outdoor signing statements and the site be developed into a gateway park.

COST ESTIMATION:

First phase Welcome/Intro Site Development ($320,000 Discussed ON PAGE 25)	
Inter-Agency Visitor Center @ $80. Sq.Ft. (Cost estimate not used in total due to future possibility)	$1,200,000

B. SILVERTON VISITOR CENTER....(FS, SILVERTON, BLM) Med.

INFORMATION/INTERPRETATION and CONCEPT: The center would have display space for printed material handouts such as pamphlets, brochures, and maps including Skyway literature and products. A scaled relief model of the Skyway and BLM Alpine Loop Drive will be included in the exhibit space. The model will show the location of Silverton, narrow gauge railroad, major peaks, and other landmarks. In addition to this, a map of the Skyway with a "You Are Here" arrow will be designed for one wall. Parking will be provided close by the center. Highway approach signs will note its location to the Skyway traveler.

COST ESTIMATION:

Scale Relief Model of Area	$ 12,000
Skyway Interpretive Exhibits (See No. 1. Intro. Site Costs)	$ 9,500

C. OURAY VISITOR CENTER.....(FS, OURAY, BLM) Med.

INFORMATION/INTERPRETATION and CONCEPT: As above in Silverton and below in Dolores the intent would be to depict the Skyway with exhibits and other printed matter. The historical overview of the city of Ouray would be discussed noting the opening up of the area by early prospectors from Eureka during the early part of the 1890's, and the subsequent rapid development of the area including the "Camp Bird" complex, which had the highest and richest gold production in the San Juans.

COST ESTIMATION:

Skyway Exhibits	$ 9,500

D. MATTERHORN WORK CENTER VISITOR AREA:.....(FS)

INFORMATION/ORIENTATION: An opportunity to display a present-day Forest work center and also give information and interpretation to the Skyway user. Visitors will be able to discover the "working Forest" concept and view activities of a Forest Work Center as well as gain information on the Skyway.

COST ESTIMATION:

Skyway Exhibits	$ 9,500

E. RICO FOREST SERVICE GUARD STATION INFORMATION CENTER....(FS)

INFORMATION/ORIENTATION: The refurbished guard station would serve as a Forest Service outlet and contact for information (including brochures, maps and Forest Association products) of the area and the Skyway. A relief model of the area and the Skyway could

be a complement to the visitors' experience. A historical sketch of this guard station and what its purpose was in forest management could lead into a general interpretive exhibit on Forest Service Guard Stations.

CONCEPT: The guard station structure would be used for both an exhibit area as well as a Forest Service "living guard station". The entry road would need to be reconstructed and a parking area to the south of the present structures. A formal walkway to the "Information/ Exhibit" would be needed. The inside of this area would also need to be designed for exhibits and display racks. Associated signing will also be necessary. A scaled display relief model would be included in the exhibit area.

COST ESTIMATION:

Skyway Exhibits	$ 9,500
Scale Relief Model	$ 9,500

F. **DOLORES TOWN SITE** POINT OF INTEREST.....(DOLORES) Low

INTERPRETIVE SUBJECT and CONCEPT: A historical sketch of Dolores would be located within the town of Dolores, perhaps complimenting the existing Dominguez-Escalante marker or within a proposed visitor center. The town was settled about 1877 by ranchers, and also influenced strongly by the coming of the Denver and Rio Grande Southern Railroad in 1881. "Dolores" (first the river and then the town) got its name from the Dominguez-Escalante of 1776. Dolores means "Sorrow", so named from the story that local Indians would throw their captured enemies into the swift current.

COST ESTIMATION:

Skyway Exhibit(s)	$ 9,500

G. **MANCOS** FOREST SERVICE VISITOR CENTER.....(FS) Med.

INFORMATION/INTERPRETATION: The facility would be used for handout of Forest information including brochures, maps, etc. The Forest Association would use it to market their different products. Exhibits could be developed for the walls, some possibilities being a Skyway map with "You Are Here" arrow, and possibly a wood production display showing the long history of the the Mancos mills and Forest Service cooperation in the supply of wood fiber products.

CONCEPT: The facility would be a remodeled Forest warehouse on the frontage road parallel to Highway 160. The facility would receive a new facade portraying a Victorian train station theme, as well as complete interior design and construction for the purpose of a small visitor center reception and display space. Parking would be provided to the south and to the east of the building.

COST ESTIMATION:

SKYWAY INTRODUCTION EXHIBITS	**$ 39,500**
INTRODUCTION FACILITIES	**$427,500**
SITES SUBTOTAL	**$4,254,800**
COMPLEMENTARY FACILITY COST ESTIMATE SUBTOTAL	**$ 69,000**
GRAND TOTAL	**$4,790,800**

VII. APPENDIX

A. BIBLIOGRAPHY

B. SKYWAY PHOTOGRAPHS

C. PROJECT PROSPECTUS

D. COST ESTIMATION "SPREAD SHEET"

A. BIBLIOGRAPHY

A. *BIBLIOGRAPHY*

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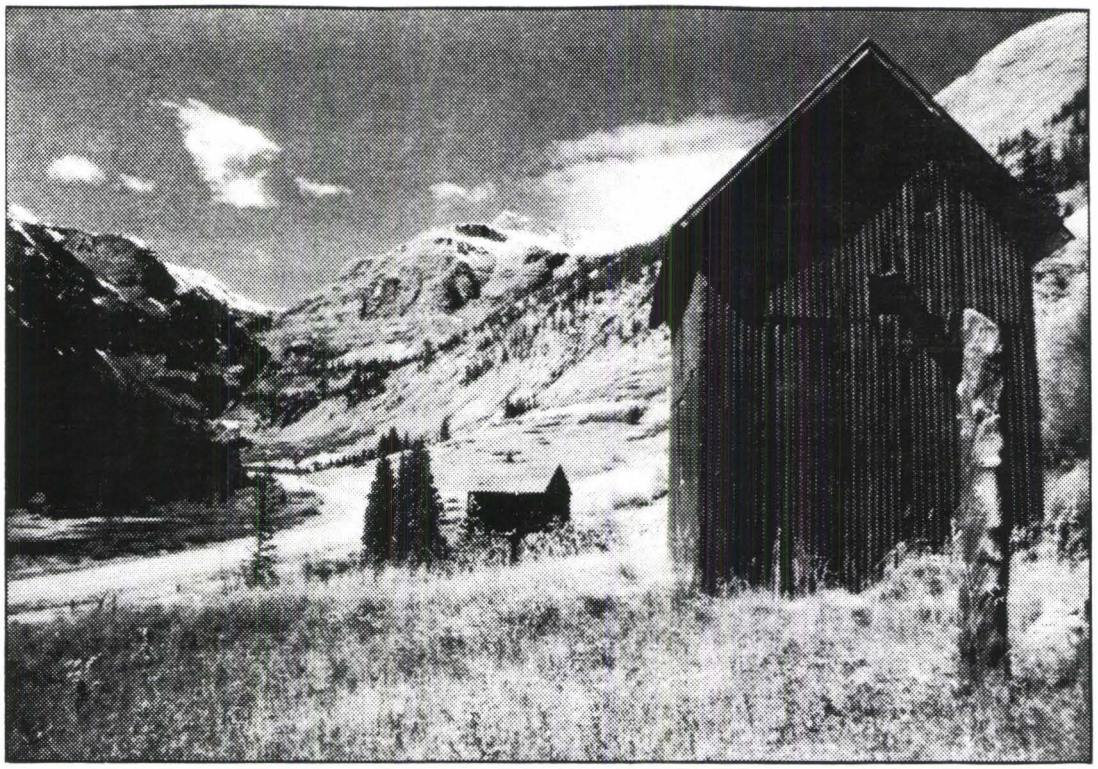
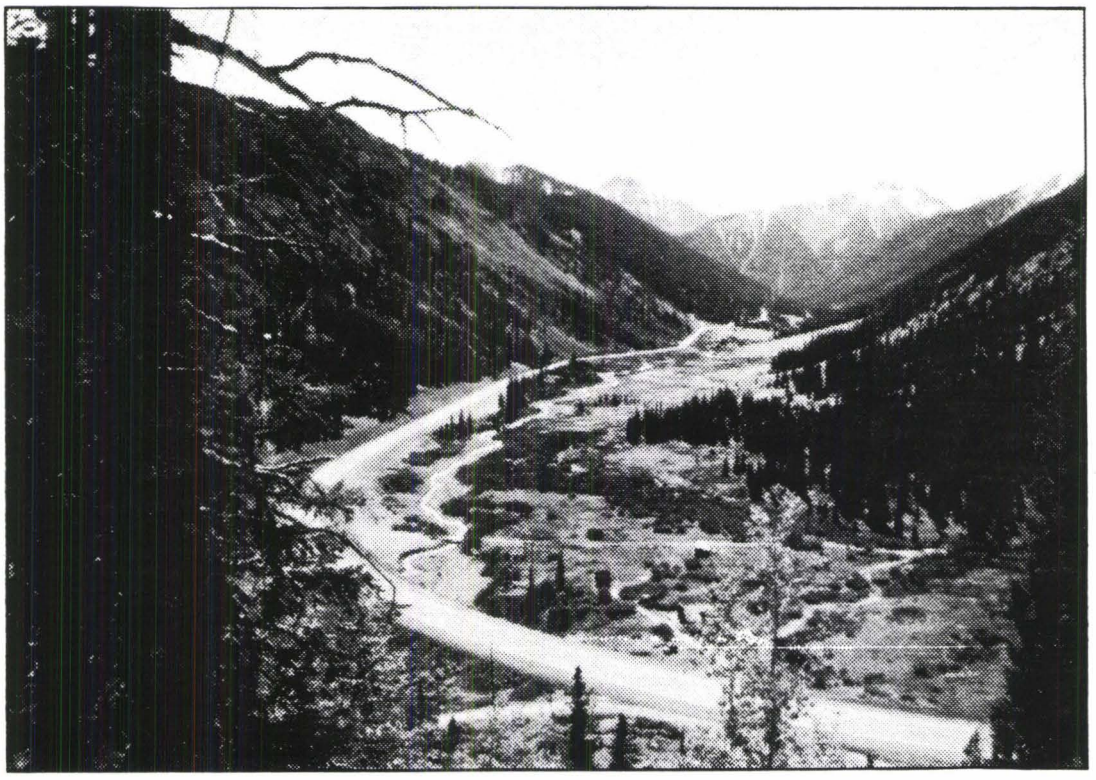
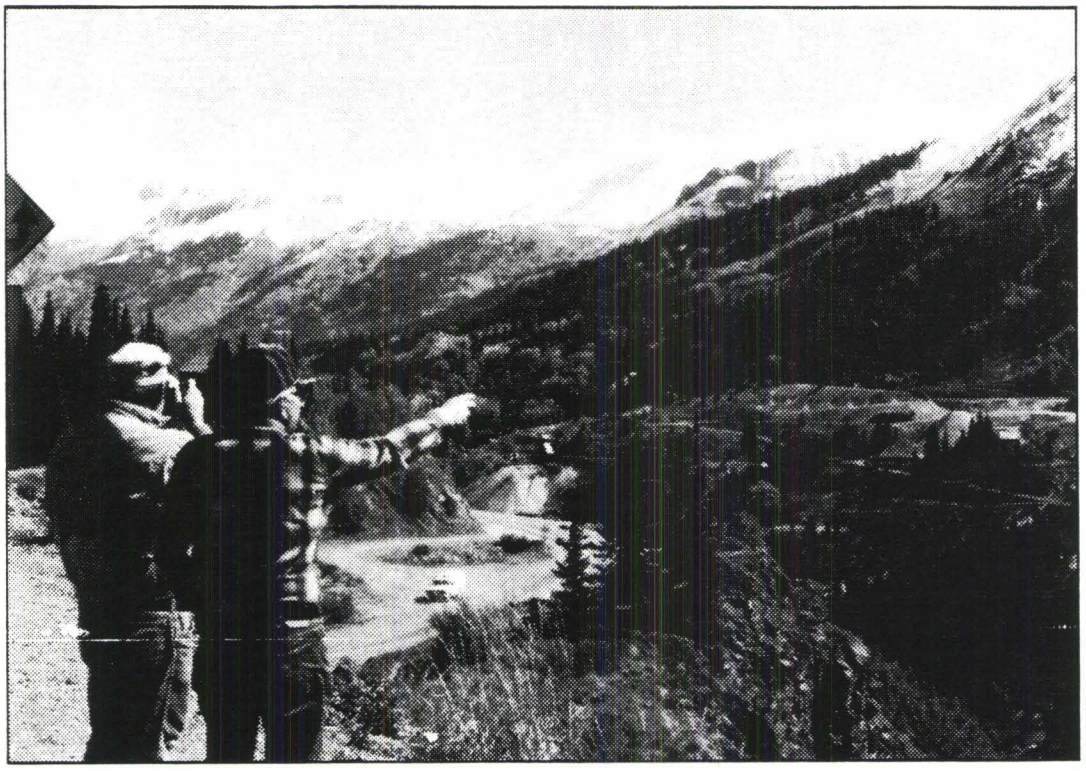


Highway 550 looking west to Chattanooga curve

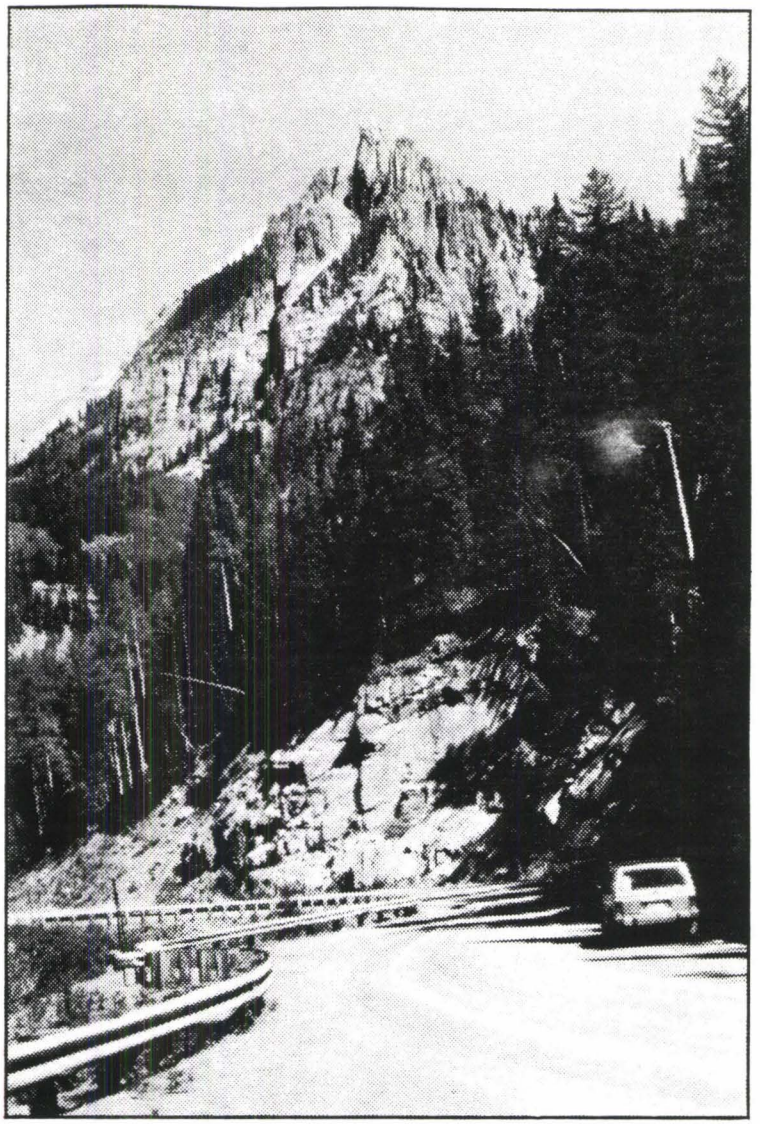


Highway 550 looking south at Chattanooga townsite

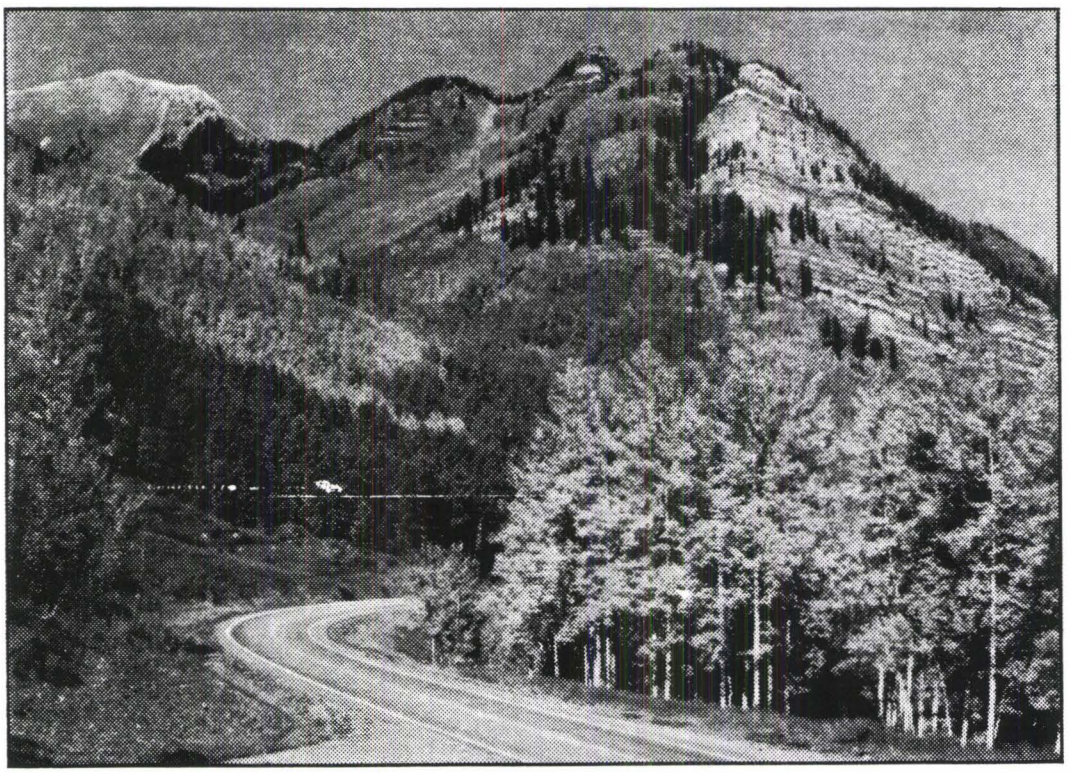
Uncompahgre Gorge looking north



Highway 550, historical mining district, Red Mountain area



Highway 145 north, Ophir Needles



Highway 145 traveling north out of Rico

C. PROJECT PROSPECTUS

CLEMSON UNIVERSITY
PROJECT PROSPECTUS
RECREATION SHORT COURSE
CLASS OF 1988

A DEVELOPMENT AND INTERPRETIVE GUIDE

THE SAN JUAN SKY WAY

A NATIONAL FOREST SCENIC BYWAY

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and Gunnison National Forest

AUDIENCE AND PURPOSE

This study is directed toward the Forest level staffs as well as the Forest Supervisors of the San Juan and Grand Mesa, Uncompahgre, and Gunnison National Forests. It will benefit the Forest Service, in the selection, development, and physical resource interpretation of the newly designated **San Juan Skyway**, a National Forest Scenic Byway. It will also aid various state and local governments as well as the associated communities, service and interest groups in the marketing of this scenic attraction for tourism. Finally, it will directly benefit the American public or other international visitors to southwestern Colorado and enhance their enjoyment of the area.

The 232 mile route through the San Juan Mountains of Colorado, including the historical section of the Million Dollar Highway, was designated by Forest Service Chief Dale Robertson as a **National Forest Scenic Byway** on November 11, 1988. It was the first Scenic Byway designated in Colorado. The nationally popular drive connects the historic mountain towns of Durango, Silverton, Ouray, Telluride, and Cortez. The drive traverses some of the most spectacular, rugged and primitive landscapes in America. The area is rich in cultural resources ranging from that of prehistoric man, to receint times including the colorful mining era of the San Juan Mountains around the turn of the century. In keeping with some of the primary goals of the National Forest Scenic Byway program, the physical development of highway pull-offs for scenic overlooks and historical or natural feature interpretation will be vital.

OBJECTIVES

There are two major objectives of this study. They are: 1). Identify all existing and potential interpretive sites suitable for development along the Byway, and 2). To provide comprehensive interpretive themes or concepts for each of the above sites. A short discussion of each of these as follows:

1). This effort will describe the physical features of each site and qualify its relative importance in relation to other sites. A priority and development schedule will be completed for this inventory. A major intent of this effort will be balancing the number, distances, and types of interpretive sites and related recreational activities provided along the route.

2). The interpretive themes or concepts will be a result of the predominant feature or resource of or around the individual sites, giving direction sufficient to make each site unique by the way interpretive subjects will be treated. The result will be that each interpretive display will follow a defined theme that will be consistently threaded thoughout the entire loop drive. These themes will be a result of the latest research in the interpretive science field. This in turn will solve some of the traditional problems in natural or cultural resource interpretation such as redundancy of subject matter, and boring the visitors with too many facts and figures. The intent will be for visitor enjoyment and orientation, not for academic instruction.

This paper is not intended to be a comprehensive interpretive or management plan for the San Juan Skyway, as either of these two tasks would involve far more time and resources than are allotted for this study.

D. SKYWAY COST ESTIMATION "SPREAD SHEET'

D. SKYWAY COST ESTIMATION "SPREAD SHEET"

SKYWAY SITE

SITE #	SITE NAME	DISTRICT	RANKING	LAND OWN.	PAD TYPE	PROJECT COST	AC/DC	TOTAL
01	Skyway Intro. Sites *		High		Atypical	$443,500	$0	$443,500
02	Train Overpass	Animas	Moderate	CDOH/Private	Expanded	$54,000	$0	$54,000
03	Shalona Overlook	Animas	Moderate	FS	Standard	$43,000	$65,000	$108,000
04	Hermosa Cliffs POI	Animas	Moderate	CDOW	Exp/Atyp	$83,000	$65,000	$148,000
05	Weminuche Overlook	Animas	Low	Private	Standard	$66,850	$0	$66,850
06	Potato Hill Overlook	Animas	Moderate	FS	Standard	$81,250	$0	$81,250
07	Purgatory/La Plata Overlook	Animas	Moderate	FS	Standard	$81,450	$0	$81,450
08	Coal Bank Pass RA *	Animas	High	FS	Atypical	$102,000	$0	$102,000
09	Twilight Peak Overlook	Animas	Moderate	FS	Standard	$93,950	$0	$93,950
10	Lime Creek Burn POI *	Animas	Low	FS	Expanded	$46,700	$65,000	$111,700
11	Molas Overlook	Animas	High	FS	Exp/Atyp	$116,600	$175,000	$291,600
12	Kendall Mountain Overlook	Animas	Low	BLM	Expanded	$80,600	$65,000	$145,600
13	Silverton Overlook	Animas	Moderate	Private	Standard	$75,350	$0	$75,350
14	Chattanooga POI *	Animas	Low	FS	Standard	$74,000	$0	$74,000
15	Red Mountain Pass POI *	Animas	High	FS	Atypical	$164,000	$65,000	$229,000
16	Ironton/Corkscrew POI	Ouray	Moderate	FS	Expanded	$87,500	$65,000	$152,500
17	Upper Uncompahgre Gorge Camera Point	Ouray	Low	CDOW	Camera Point	$8,000	$0	$8,000
18	Snowshed Overlook *	Ouray	Moderate	FS	Atypical	$48,000	$0	$48,000
19	Uncomp. Riv. Waterfall POI	Ouray	Moderate	FS/BLM	Atypical	$65,400	$0	$65,400
20	Bear Creek Falls Overlook	Ouray	High	FS	Atyp./Exp.	$89,450	$0	$89,450
21	Bear Creek NRT Trailhead	Ouray	Low	FS	Atypical	$16,000	$0	$16,000
22	Ouray Overlook	Ouray	Moderate	BLM	Atyp./Exp.	$71,900	$0	$71,900
23	Big Game POI	Ouray	Low	DOW	Standard	$39,100	$0	$39,100
24	Cimarron Overlook	Ouray	Moderate	BLM	Standard/Atyp	$71,200	$0	$71,200
25	Dallas Divide Overlook	Ouray	High	CDOW	Atyp./Exp.	$105,700	$250,000	$355,700
26	RR Trestle POI	Norwood	Low	BLM	Camera Point	$8,000	$0	$8,000
27	Leopard Townsite POI	Norwood	Low	BLM	Camera Point	$8,000	$0	$8,000
28	Placerville Intro. Site	Norwood	Low	Private	Standard	$53,750	$0	$53,750
29	Vanadium POI	Norwood	Moderate	BLM	Atypical	$26,000	$0	$26,000
30	Highway 145/Telluride	Norwood	High	FS	Standard	$63,000	$0	$63,000
31	Gold Gulch Camera Point	Norwood	Low	FS	Camera Point	$8,000	$0	$8,000
32	Grassy Knoll Overlook *	Norwood	Moderate	FS	Atypical	$105,000	$65,000	$170,000
33	Ophir Camera Point	Norwood	Low	FS	Camera Point	$8,000	$0	$8,000
34	Trout Lake Overlook	Norwood	Moderate	FS	Standard	$97,250	$65,000	$162,250
35	Lizard Head Pass RA/POI *	Norwood	High	FS	Expanded	$190,000	$0	$190,000

36	Lizard Head Camera Point	Dolores	Low	FS	Camera Point	$8,000	$0	$8,000
37	Rico POI	Dolores	Low	FS	Standard	$67,000	$0	$67,000
38	Rico Coke Ovens POI	Dolores	Low	Private	Camera Point	$8,000	$0	$8,000
39	Scotch Creek POI	Dolores	Low	FS	Atypical	$2,000	$0	$2,000
40	Bear Cr. Rest Area/Trailhead	Dolores	Moderate	FS	Atypical	$76,000	$250,000	$326,000
41	Aspen View Overlook	Dolores	Low	FS	Standard	$79,250	$0	$79,250
42	Red Cliffs POI	Dolores	Low	Private	Standard	$70,650	$0	$70,650
43	McPhee Camera Point	Dolores	Low	BOR	Camera Point	$13,000	$0	$13,000
44	Cortez Overlook	Dolores	Moderate	CDOH	Standard	$50,100	$0	$50,100
45	Sleeping Ute Overlook	Mancos	Moderate	FS/CDOH	Atypical	$54,000	$0	$54,000
46	Mancos Valley Overlook	Mancos	Low	CDOH	Standard	$61,450	$0	$61,450
47	Thompson Park/Overlook	Mancos	Moderate	FS	Standard	$62,050	$250,000	$312,050
48	Hesperus Hill Camera Point	Mancos	Low	Private	Camera Point	$13,000	$0	$13,000
49	Comp. Fac. Interp. Exhibits	All	High	Mixed	NA.....	$77,000	$0	$77,000
					TOTAL	$3,417,000	$1,445,000	$4,862,000

TOTAL COSTS	*	$4,862,000
20%		$972,400
GRAND TOTAL		$5,834,400
50% OF TOTAL		$2,917,200
PHASE 1 FUNDING		$800,000
PHASE 2 FUNDING		$2,117,200

* Phase 1 Submitted 11/88

FS - Forest Service
BLM - Bureau of Land Mgmt.
BOR - Bureau of Reclamation
CDOW - Colo. Div. of Wildlife
CDOH - Colo. Div. of Highways

RA - Rest Area
POI - Point of Interest

* NOTE: Spreadsheet totals where used for CIP submittal 3/90. These will differ from those indicated in the text of the paper)

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end.